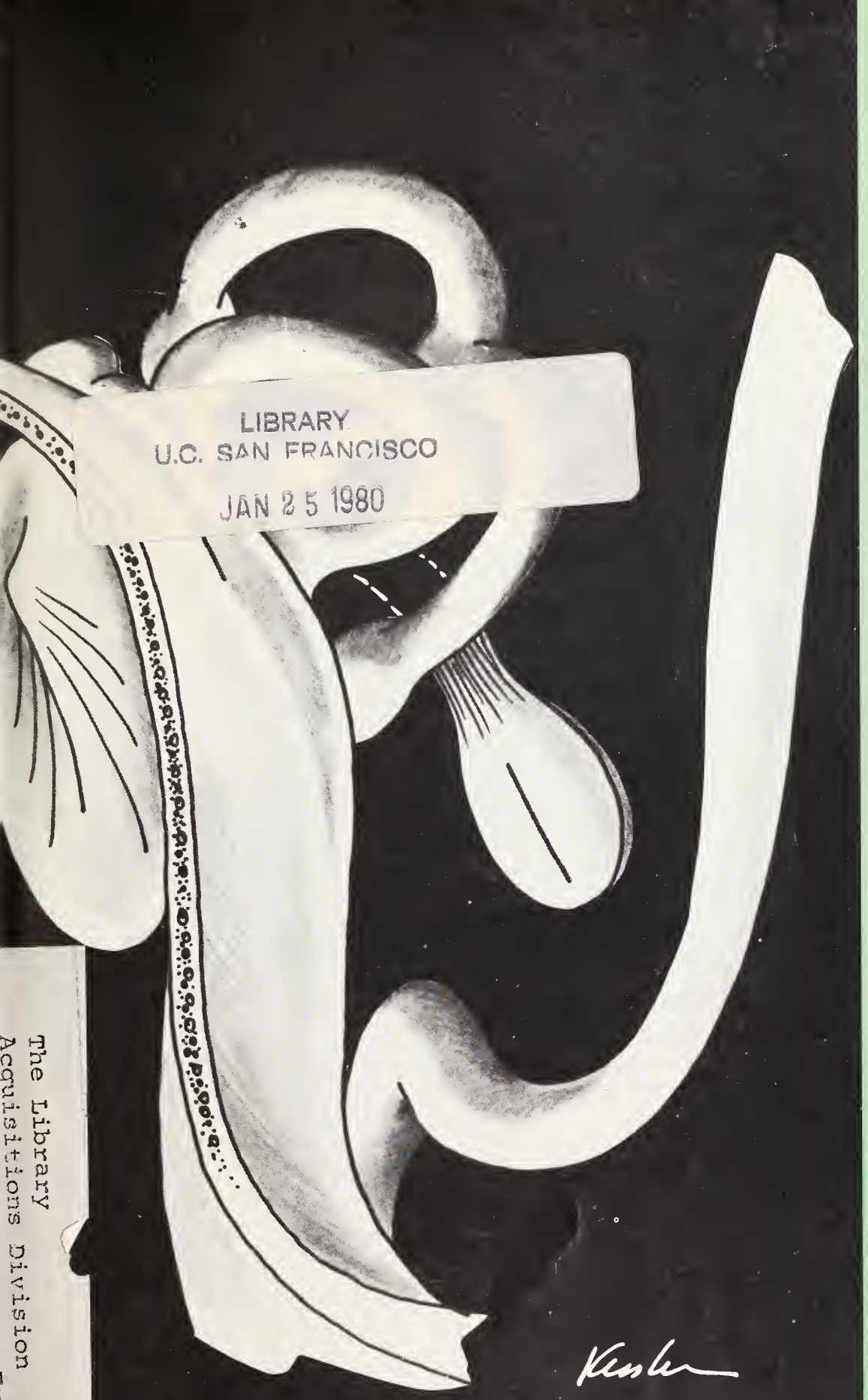
UC-NRLF
C 3 063 894

Digitized by the Internet Archive
in 2016

https://archive.org/details/journalofmedical771unse

January 1980

Journal of the Medical Society of New Jersey



LIBRARY
U.C. SAN FRANCISCO
JAN 25 1980

The Library
Acquisitions Division

The Inner Ear

Intractable Vertigo
S. C. Parisier, M.D.; J. M. A. Shugar, M.D.

Stapedectomy Update
Milton Ingerman, M.D.

Spontaneous Myocardial Cholesterol Embolization
F. Pschibul, M.D.; E. W. Ward, M.D.

Complete Table of Contents on Page 4

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____



Tagamet®
brand of
cimetidine

How Supplied:
Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
PRESIDENT-ELECT
Augustus L. Baker, Jr., M.D. (Morris) Dover
FIRST VICE-PRESIDENT
Armando F. Goracci, M.D. (Gloucester) Woodbury
SECOND VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
IMMEDIATE PAST-PRESIDENT
Charles S. Krueger, M.D. (Burlington) Mount Holly
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
James S. Todd, M.D. (1980) (Bergen) Ridgewood
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Palma E. Formiča, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1980) (Cumberland) Bridgeton
William Greifinger, M.D. (1981) (Essex) Belleville
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Alexander Kovacs, M.D. (1981) (Union) Scotch Plains
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1980) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Vacancy
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1980) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1980) Haddonfield
Karl T. Franzoni, M.D. (1980) Trenton
Henry J. Mineur, M.D. (1980) Cranford
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

January 1980

Publication Committee

John F. Marshall, M.D., *Chairman*
Julio C. del Castillo, M.D.
Paul J. Hirsch, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

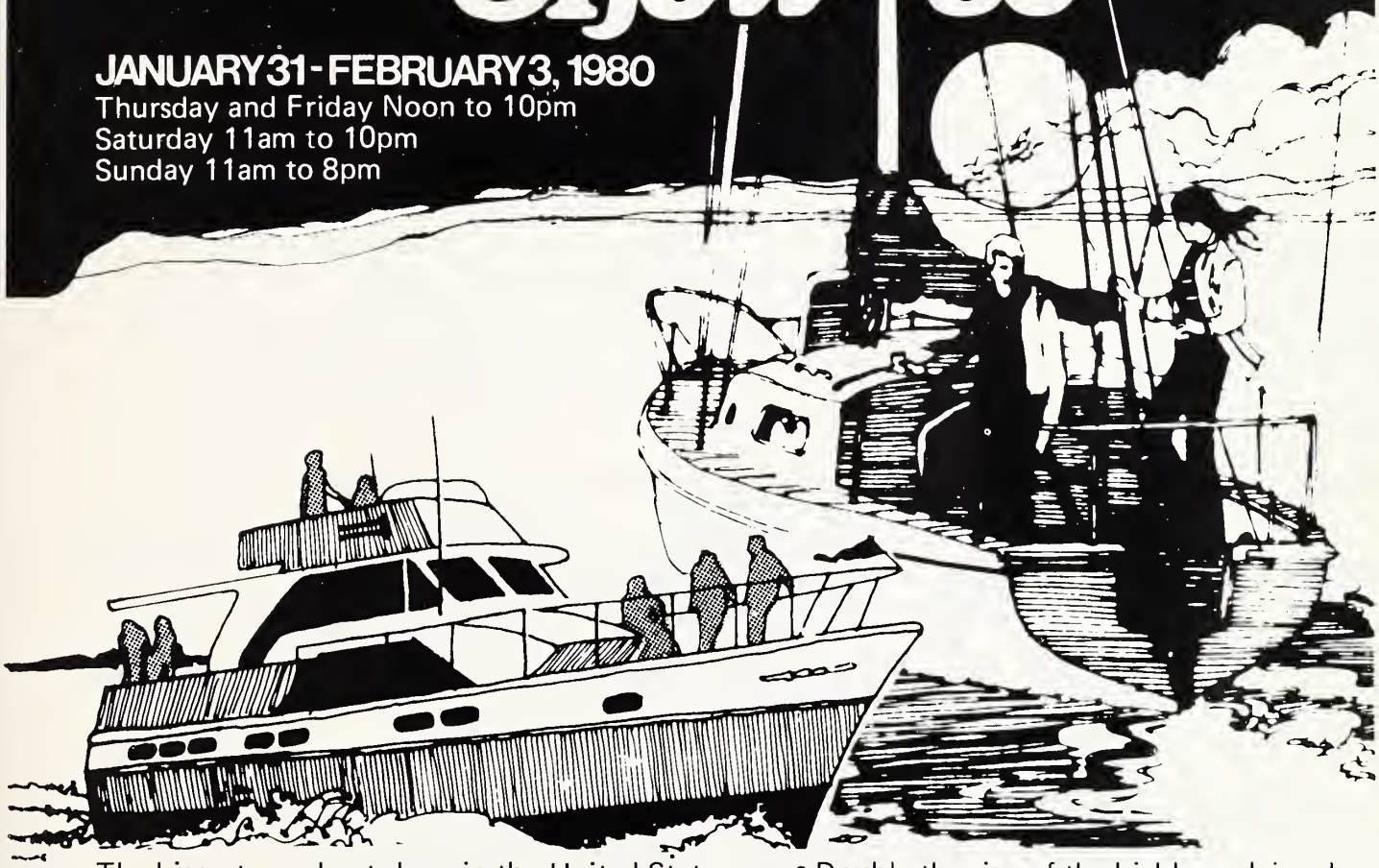
Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Donald S. Kwalick, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 907. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies, $1. Address communications to *The Journal,* MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.

The Atlantic City Boat Show '80

JANUARY 31 - FEBRUARY 3, 1980
Thursday and Friday Noon to 10pm
Saturday 11am to 10pm
Sunday 11am to 8pm



- The biggest new boat show in the United States—more than 300 power boats and sail boats
- More than 10 million dollars worth of boats and accessories
- Double the size of the highly acclaimed 1979 Atlantic City Boat Show
- Motor yachts to 48 feet, Sailing yachts to 50 feet, Sport fishermen to 42 feet, Trawlers to 45 feet

The Atlantic City Boat Shows '80

Produced by: Creative Mall Promotions, Inc.

Bigger & Better Than Ever!

Convention Hall
Atlantic City, N.J.

January 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

Volume 77
Number 1

Pages 1-80

11 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

13 Riding to Death

13 Medical Technological Advances and Health Care Costs

ORIGINAL ARTICLES

19 Surgical Management of Perforated Diverticulitis of Sigmoid Colon
T. Logio, M.D.; E. Salvati, M.D.; R. Rubin, M.D.; E. Aucoin, M.D., Plainfield

23 Surgical Treatment of Intractable Vertigo
S. C. Parisier, M.D.; J. M. A. Shugar, M.D.

STATE-OF-THE-ART

29 Current Stapedectomy Update
Milton Ingerman, M.D.

CASE REPORTS

33 Mesenteric Embolectomy
J. G. Crowley, M.D.; E. C. Mariano, M.D.

37 Spontaneous Myocardial Cholesterol Embolization
F. Pschibul, M.D.; E. W. Ward, M.D.

REVIEW ARTICLE

43 Pneumonia: A Clinical Review
H. H. Kesarwala, M.D.

48 **ANNUAL MEETING HOUSING APPLICATION**

49 **THERAPEUTIC DRUG INFORMATION**

51 **PEDIATRIC BRIEFS**

53 **AMENDMENTS TO MEDICAL EXAMINERS' RULE 13:35-6.6**

54 **HELP FOR IMPAIRED PHYSICIANS**

DOCTORS' NOTEBOOK

55 Trustees' Minutes

57 House of Delegates—Special Session

60 CMDNJ Notes

61 Report from the Foundation

61 Physicians Seeking Location in New Jersey

67 **LETTERS TO THE JOURNAL**

68 **CME CALENDAR**

72 **OBITUARIES**

75 **BOOK REVIEWS**

Note Dates and Location →

214th Annual Meeting
May 10-13, 1980
Meadowlands Hilton, Secaucus

Fifty Percent of our Traumatically Injured Patients are the Victims of Motor Vehicle Accidents.

Drive Patiently for a Happier New Year.



New Jersey Rehabilitation Hospital

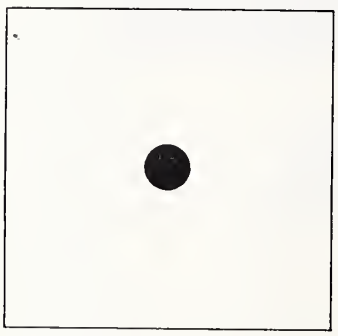
240 Central Avenue East Orange, NJ 07018 • 201-673-1860

Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics, Inc.

365443

A blood clot the size of this dot can cause a Heart Attack.



Or a stroke.

Every year, thousands die because of a blood clot. Thousands more become disabled, some permanently.

What's being done to stop it?

Plenty.

We're the American Heart Association. We're giving scientists the chance to find out more about blood clots.

How to detect them. How to treat them. How to keep them from happening.

We're fighting hard. With new drugs. New kinds of treatment. Better ways to help heart attack and stroke victims return to a normal life.

And it's only a part of the total war we're waging against the number one cause of death in this country: heart disease and stroke.

But we can't fight without your money. When the Heart Association volunteer asks for your dollars, be generous.

The blood clot is small, the problem is enormous.

The American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

- Bendectin continues to be the only product indicated exclusively for morning sickness — nothing else.
- Convenient bedtime dosage.
- Works in the morning when she needs it most.

Bendectin®

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION
Nausea and vomiting of pregnancy.

PRECAUTIONS
Because of potential drowsiness, Bendectin should be prescribed with caution for patients who must drive automobiles or operate machinery.
Studies in rats and rabbits have revealed no suggestion of drug-induced fetal abnormalities at doses of Bendectin up to 90 times the maximum human dose. In addition, several epidemiologic studies in women who received Bendectin during pregnancy have shown that the incidence of birth defects in their offspring is no higher than in women not taking the drug during pregnancy. Nevertheless, like all drugs considered for use during pregnancy, particularly during the first trimester, Bendectin should be used only when clearly needed.

ADVERSE REACTIONS
The adverse reactions that may occur are those of the individual ingredients. Doxylamine succinate may cause drowsiness, vertigo, nervousness, epigastric pain, headache, palpitation, diarrhea, disorientation, or irritability.
Pyridoxine hydrochloride is a vitamin that is generally recognized as having no adverse effects.

DOSAGE AND ADMINISTRATION
2 Bendectin tablets at bedtime. In severe cases or when nausea occurs during the day: 1 additional Bendectin tablet in the morning and another in midafternoon.

Product Information as of January, 1978

References:

1. Meyer, C.: American Folk Medicine. Scarborough, New York, Plum Books — New American Library, 1975, p. 208.
2. Data on file, MERRELL-NATIONAL LABORATORIES Division of Richardson-Merrell Inc. Cincinnati, Ohio 45215

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

MNQ-013


1830: A decoction of columbo root and peppermint 3 or 4 times a day should be taken for the sickness to which pregnant females are commonly subject.[1]
TODAY: Clinical studies show statistically proven efficacy for morning sickness of pregnancy with delayed-release Bendectin tablets.[2]
In morning sickness confidence begins with
Bendectin®
Each tablet contains doxylamine succinate 10 mg., pyridoxine hydrochloride 10 mg.
trusted alternative to nausea and vomiting of pregnancy
For prescribing information see opposite page.

The Journal, the Medical Society of New Jersey
Information for Readers and Contributors

The Journal is the official organ of the Medical Society of New Jersey. It is published monthly under the direction of the Committee on Publication and is released the first week of the month. A copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. Each issue contains material of special interest to the members, including actions and opinions of the Board of Trustees. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles, case reports, review articles, clinical notes,* and *special articles.* Contributors must understand that material submitted here is for exclusive publication in *The Journal.* The Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal;* such permission must be requested by the author. The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Accuracy, honesty, and comprehensibility are primary requisites. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal,* MSNJ."

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SCIENTIFIC ARTICLES

Scientific articles should be based on personal studies and observations by the authors. The content may include research data, original concepts relative to epidemiology of disease, treatment methodology, educational theory and practice, and so on. Papers of this description may be technical or clinical in nature, but relevance to our readership must be considered.

CASE REPORTS

One or more interesting or unusual clinical case experiences may be submitted for consideration. The case(s) should have unique features worthy of the attention of our readers. Case reports should be short, and the discussion should deal with the condition described. References must be limited; a case report is *not* a review of the world's literature.

CLINICAL NOTES

The Editor will consider brief items of interest to clinicians. Clinical notes may include some aspect of a case experience or deal with a new observation or technique. Clinical notes do not require the benefit of intensive research nor references, but should be succinct, didactic presentations.

SPECIAL ARTICLES

These will include scholarly evaluations, essays, policy and position papers, medical history, and reviews of non-scientific subjects.

REVIEW ARTICLES

Authors may submit comprehensive reviews on topics of interest, but such reviews must be careful critiques based on personal reading of reference articles. Authors of review articles are advised to discuss in advance with the Editor the potential for publication of a particular topic.

EDITORIALS

The Editor and Associate Editors prepare editorials on timely and relevant subjects for *The Journal.* Guest contributors will be invited to prepare editorials on specific topics. Editorials may be provocative, but will remain within the bounds of good taste and legal restrictions. Special editorials may pay tribute to past or present members of the Society who have attained high office or made important contributions worthy of special recognition. Editorials may comment on original articles. All editorials are the responsibility of the authors and not of the Medical Society of New Jersey.

COMMENTARIES

The commentary is a long editorial which deals with a particular topic in greater detail. Commentaries will be written by the editorial staff or by invited contributors.

NEW JERSEY DOCTORS' NOTEBOOK

This department contains organizational and administrative items from the Medical Society. It also contains reports and information worthy of special attention to New Jersey physicians. Material may emanate from within the Society, from state or federal government agencies or elsewhere. Actions of the Board of Trustees will be recorded here. Names, addresses, specialties, and qualifications will be published regularly for physicians seeking to locate in our state—as a service to them and to physicians and hospitals looking for practitioners as associates or employees.

LETTERS

Letters to the Editor will be published. Here again, the bounds of good taste and legal considerations dictate a measure of restraint, although correspondents are free to express their opinions.

BOOK REVIEWS

Books of interest to physicians or their patients will be reviewed. The Editor will request a member of the Society or

another qualified person to review each book and to prepare a succinct comment for publication in *The Journal* and for the benefit of the publisher.

CME CALENDAR

The Journal publishes a calendar of medical events in New Jersey in a timely fashion to assist physicians in their continuing medical education. The material is compiled by MSNJ's Committee on Medical Education, the Academy of Medicine of New Jersey, the New Jersey Chapter of the Academy of Family Physicians, and the office of Continuing Education of the College of Medicine and Dentistry of New Jersey.

ADVERTISEMENTS

The Journal accepts advertising material of interest to physicians from national and local sources. Each item is scrutinized for accuracy and fairness, but *The Journal* does not "warrant the safety or efficacy of products so advertised."

OBITUARIES

Notices of the death of members of the Medical Society of New Jersey are published in *The Journal* as soon as possible after receipt of information. These will be factual rather than personal since they are prepared by the editorial staff.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten doublespaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editor. Authors must understand that the essential content of the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data, special photographs, and so on).

Tables and Illustrations—Tables must be typewritten, doublespaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality, photographed and submitted as black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page— The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article. Because of its brevity every word and idea counts. The abstract is a summary of the summary.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed doublespaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus.*

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

Authors are responsible for the accuracy of references. The reference list should not exceed 35 citations except in review articles. Where the number of references is excessive, *The Journal* may ask the author to bear the cost of the extra pages.

PUBLICATION POLICY

The receipt of each manuscript will be acknowledged immediately and the manuscript delivered to the Editor who will begin the review process. *The Journal* maintains a Manuscript Review Board, appointed by the Board of Trustees. The members are acknowledged authorities selected from the membership of MSNJ. The Editor sends each manuscript to one or more reviewers who carefully scrutinize the material and render an opinion to the Editor as to the potential for publication. The final decision is reserved for the Editor. Where necessary, qualified ad hoc reviewers are consulted. The Editor notifies the authors of his decision. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. After acceptance, galley proofs will be prepared and submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar should not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

CHANGE OF ADDRESS

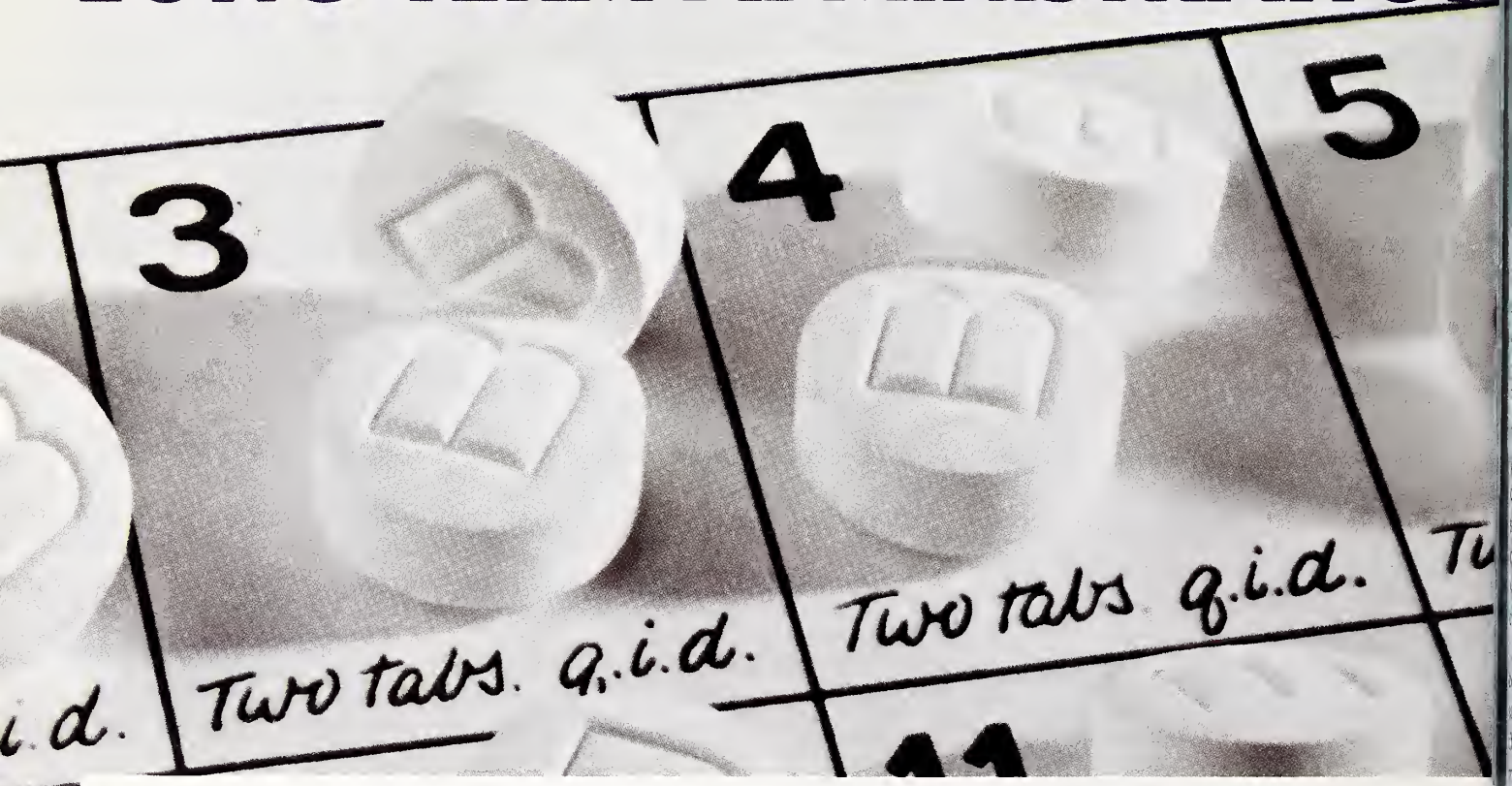
Notice of change of address should be sent promptly to the Medical Society of New Jersey, 2 Princess Road, Lawrenceville, New Jersey 08648.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal,* MSNJ, 2 Princess Road, Lawrenceville, New Jersey 08648.

Are you prescribing a regimen of PLAIN ASPIRIN EVERY DAY?

BUFFERIN® WAS SIGNIFICANTLY BETTER TOLERATED IN LONG-TERM ADMINISTRATION





In a particular series of 14-day gastric tolerance studies among 182 normal subjects, 49% suffered G.I. upset from plain aspirin. Most of these subjects took BUFFERIN without discomfort.

Subjects in these controlled trials, which utilized a crossover design, were given Bufferin and Bayer® Aspirin for two weeks each in a balanced order of administration. The cumulative gastric tolerance superiority of Bufferin over plain aspirin was significant ($P = <.01$) from day one and persisting through each day of the study. This superiority for an extended period could be of particular importance to patients on repeat-dosage schedules.

For full aspirin benefits, together with excellent gastric tolerance, Bufferin should be your brand of choice. If you are prescribing a regimented daily dose of aspirin, prescribe Bufferin—the repeat-dosage aspirin—instead.

BUFFERIN: The Repeat-Dosage Aspirin.

For complimentary samples of Bufferin and Arthritis Strength Bufferin, please write: Bufferin, P.O. Box 65, Elizabeth, New Jersey 07207.
Composition: Each Bufferin tablet contains aspirin 324 mg. and the antacid Di-Alminate® (Bristol-Myers' brand of Aluminum Glycinate 48.6 mg. and Magnesium Carbonate 97.2 mg.).

©1978, Bristol-Myers Co.

Featuring: Medical Professional Liability Picture in New Jersey Potential Liability of Hospital Staff

MEDICAL PROFESSIONAL LIABILITY PICTURE IN NJ

Peter Sweetland, President, New Jersey State Medical Underwriters

It is hard to pick up a medically related periodical these days without noting some commentary on the return of the "Malpractice Crisis." The November 12th issue of *Business Week* takes a page to discuss rising rates while *Medical Economics* used a cover article in a recent issue to outline many new concerns.

Is New Jersey headed for another upheaval in this area? We don't think so. We must recognize, however, that the basic problems are still with us. An increasing number of claims are being filed against doctors each year and the value of these cases, expressed in judgments and settlements, is growing at a rate equal to, or greater than, present inflation. These trends have persisted since the mid-sixties. Most of the present rate increases across the country are attempts to keep pace with escalating results. It is clear now that the large commerical insurers overcompensated for trends in the mid-seventies creating an availability problem. The new doctor-owned companies came upon the scene in an atmosphere of very adequate rates and suppressed legal activity. Some concluded that the problem was solved. We did not.

The Medical Inter-Insurance Exchange of New Jersey continues to maintain a conservative view of the future at the same time that aggressive steps are being taken to improve the outcome. Our attack is on two fronts: (1) Efficient management of all costs through the efforts of the best available medical and insurance professionals and (2) Support of a truly productive loss-prevention effort controlled by the Medical Society of New Jersey.

Results to date in the first area are impressive. Normal processing and administrative details are supported by computer and have produced savings from the outset. Claim handling has been streamlined in several ways not used before in the insurance industry. The most extensive saving has come from better management of defense costs, primarily attorneys' fees. While other companies put every case in the hands of lawyers immediately, we have confined their efforts to legal work. As a result, our allocated loss expenses are running 1-1/4 percent of total payments rather than the industry average of 13 percent.

Our efforts in the second area, loss prevention, are underway but time is still needed to build the information base and establish the most effective communication channels. It is planned that, in future months, these pages will become one of those information links.

Until loss-prevention efforts can produce results, we can expect the adverse trends in frequency and severity to continue. Projections for 1980 call for a modest rate increase. Our many improvements have modified the impact of loss trends on rates. We expect that they will continue to do so when coupled with our greatly improving investment results.

We conclude that sound management should keep changes in reasonable bounds and positive loss prevention results could create improvements. The problem still exists but (New Jersey) physicians are going to have a hand in controlling it. The cries of panic are unwarranted.[a]

POTENTIAL LIABILITY OF HOSPITAL STAFF

In the October issue of *Medical Liability Reporter* Edward E. Hollowell, J.D., discussed the risk of potential liability to physicians in the performance of their duties as member of various hospital staff committees. The following is quoted with permission of the St. Paul Fire and Marine Insurance Company:

"The stated purpose of this article was to assess the degree of risk to a physician serving as a member of a staff committee that evaluates peer competence. The analysis was intended to make this point: courts are expanding the potential liability of committee members, staff members, and members of governing boards. Such holdings, particularly as applied to individual committee members, have a solid foundation in well-settled common law principles. The only real surprise may be that such attempts to obtain additional sources for recovery have been so long in coming.

"The assessment must be that significant potential liability does exist. The degree of risk is directly proportional to the degree of negligence on the part of the individual committee member. Both the diligent and the lackadaisical risk being named as defendants. That risk cannot be eliminated. The risk of suffering a loss, however, is minimal for the careful and perhaps staggering for the careless.

"The lesson to be learned is this. The physician who serves on any committee responsible for evaluation of qualifications or practices should:

"• Investigate thoroughly;

"• Insist that records of the decisions of the committee and the facts upon which those decisions are based are recorded;

"• Be sure that the objection is made a matter of record in

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

[a](*Note from Mr. Rouse, editor of this column:* George R. Cross, Chairman of the Board of New Jersey Medical Malpractice Reinsurance Association was unable to respond to the topic at this time.)

those instances where the physician disagrees with the decision of the committee;

"• Be certain that the individual professional liability insurance policy covers committee work;

"• Urge that the hospital staff itself carry liability coverage against actions of individual physicians and the medical staff as a whole; and

"• Above all, treat these matters with the care their potential danger warrants."

DID YOU KNOW

. . . According to *the report of the Secretary's Commission on Medical Malpractice* in 1970, 6.5 claim files were reported per 100 active practitioners. As of 9/30/79 the MIIENJ reports approximately 7 claim files per 100 active practitioners.

. . . A 1973 report prepared for the *Secretary's Commission on Medical Malpractice* regarding consumer attitudes suggests that negative attitudes of health benefactors toward physicians are significantly related to the number of reported incidents. Among those health benefactors who have a higher number of reported incidents are: those who have a closer social status to the physicians in education, income, and occupation; those who are separated or divorced; and those who exhibit difficulty maintaining interpersonal relationships. Those health benefactors who report the fewest number of incidents are: those widowed; those younger than 20; and those who never married.

. . . The United States Supreme Court refused to review the professional liability countersuit of Chicago area radiologist, Leonard Berlin, M.D.

. . . James E. George, M.D., J.D., participated as a faculty member of a medicolegal seminar on November 3, 1979 in Orlando, Florida for the Physicians' Protective Trust Fund (PPTF of Florida). Comments and information regarding New Jersey's Professional Liability experiences were well received by Florida physicians.

CASE SURVEY

Unable to contact the physician after office hours, the parents of a three-and-a-half-year old child left a message with the answering service reporting the child's development of a high fever. The physician checked with his answering service and returned a phone call to the parents only to receive no answer. A short time later the answering service contacted the physician to inform him that the parents had taken the child to a hospital. The physician did not have privileges at the hospital and did not respond to the message. The following morning the parents informed the physician that the child's condition (epiglotitis) had worsened and that she had expired.

A claim was filed alleging that the physician's failure to respond to the phone calls contributed to the girl's death and thus the physician failed to render professional care and treatment. Since the physician did attempt to contact the parents and since he did not have privileges at the hospital where the child was admitted, a peer review found the physician not to be negligent in rendering care and treatment. The plaintiffs did not pursue this claim any further and the case was closed.

The plaintiff is generally frustrated and angry because the physician "appeared" not to respond to the situation in a concerned, exemplary manner. In this particular incident, a call to the hospital to communicate and ascertain that the needs of the patient were being met would have been good medical practice. Many claims of this nature can be avoided through better public relations on behalf of the physician.

MEDICOLEGAL Q AND A

James E. George, M.D., J.D., Director of the Department of Professional Liability Control, receives letters from physicians requesting answers to information presented in the *Physician Legal Bulletin* or pertaining to some other medicolegal matter. Selected answers to letters considered to be of mutual interest to Society members will be shared in the Commentary.

Dear Doctor George:

"Under what circumstances is a 'nearest relative' or member of the family legally entitled to give or deny consent, unless he has been formally appointed to guardianship of the patient?" (signed) A Physician

Dear Doctor:

Generally speaking, there are few, if any, circumstances under which a family member is legally entitled to withhold consent for a minor or incompetent patient in need of medical treatment. If such a patient is in the hospital and in need of expeditious treatment, steps should be taken in concert with hospital administration and legal counsel to obtain a court order appointing a legal guardian able to consent to the needed treatment.

What about a family member's attempt to give consent for the needed medical treatment of a minor or incompetent adult? The need for a legal guardian for such a patient is less urgent and may not be necessary at all when the treatment is less emergent in nature. However, if the physician feels uncomfortable under the particular circumstances of the case he should urge a family member or other person to be appointed legal guardian for the purpose of granting consent. (signed) James E. George, M.D., J.D.

DEPARTMENT ACTIVITIES

James E. George, M.D., J.D., Director of the Department of Professional Liability Control, will conduct a medicolegal seminar for the Plastic and Reconstructive Surgeons on January 19, 1980. The Department of Professional Liability Control has a seminar service available to assist in planning and presenting medicolegal seminars tailored to medical specialty needs.

Category I AMA credits are given for attendance at medicolegal seminars.

EDITORIALS

Riding to Death

In an editorial in our December issue ("Running to Death" 76:890, 1979), we pointed out the risk of unpredictable death in joggers and runners, especially when they ignore warning signs or prodromata. In this issue (page 37) Pschibul and Ward remind us of a "well-established but almost forgotten entity, namely, spontaneous embolization of the myocardium by cholesterol microemboli." The 49-year-old victim of this problem "died suddenly after returning from his daily bicycle ride in a hilly area."

It is not our purpose to wave a red flag on such forms of exercise as jogging, running and bicycle riding. On the contrary, we agree that exercise should be a daily activity for the control of diabetes, as an aid in weight-loss programs, and for its mental and physiological benefits to those participants who carefully select amounts and modes of exercise and conditioning which are reasonable for them.

We hasten to point out, however, that the physician should play a role in the development and followup of exercise programs for those at age 40 or older. Casual advice may be an invitation to tragedy, while failure to monitor the exercising patient for prodromata may be a missed opportunity.

Finally, the authors of this unusual case remind us of the obligation of the pathologist to search the myocardium carefully for cholesterol microemboli in persons who "die suddenly of arrhythmias." We might add that that should be done in all victims of sudden death where the cause is not apparent. Too often, such deaths are attributed to "natural causes" by coroners' physicians who do not consider such possibilities. We all should do our best to obtain permission for autopsy from relatives of sudden-death victims, and pathologists and coroners should try to clear up some of the mysterious deaths in such instances, if it is possible.

Can we predict or prevent such deaths due to cholesterol microemboli? Not with the present state of the art.

A.K.

Medical Technological Advances and Health Care Costs

How much of the national health care bill is due to medical technological advances? Practicing physicians are likely to believe a great deal of it is, while some medical economists say, "Medical technology *per se* is not the culprit behind rising costs in health care."[1] No matter which side of the question one selects, there are those who say that as much—or more—money would have been spent by the health care industry in the same time frame, for other reasons, even were there few or no medical technological advances. Is such a notion believable?

MEDICAL CARE PRICE INDEX (MCPI) AND TECHNOLOGY

A favorite ploy in the discussion of health care costs over time is the evaluation of the Medical Care Price Index (MCPI). The usual plot of this information shows time on the horizontal axis and the MCPI on the vertical axis (see figure). Using this system, one can display a variety of health cost indices (hospital daily service charges, physicians' fees, total medical care cost, dentists' fees, drugs and prescriptions, eye care costs, computerized tomography (CT) scanner costs, Medicare/Medicaid expenditures, and so on). It is usual to compare such curves with the total consumer price index.

Before attempting to answer the original question and considering the MCPI, one might take a look at the types of technology in light of their real or potential value to the health and the quality and duration of life of the citizens of this country. One classification includes the following:[1]

TECHNOLOGIES

1. Diagnostic
2. Prevention
3. Survival
4. Disease management
5. Cure
6. Health care system management
7. Health education

Although there is some degree of overlapping of technological advances in the units of this classification, generally it is useful. Table 1 is a fairly complete resumé of those techniques which are in regular use today, but were mainly developed or extended into ordinary medical practice in the last fifteen years.

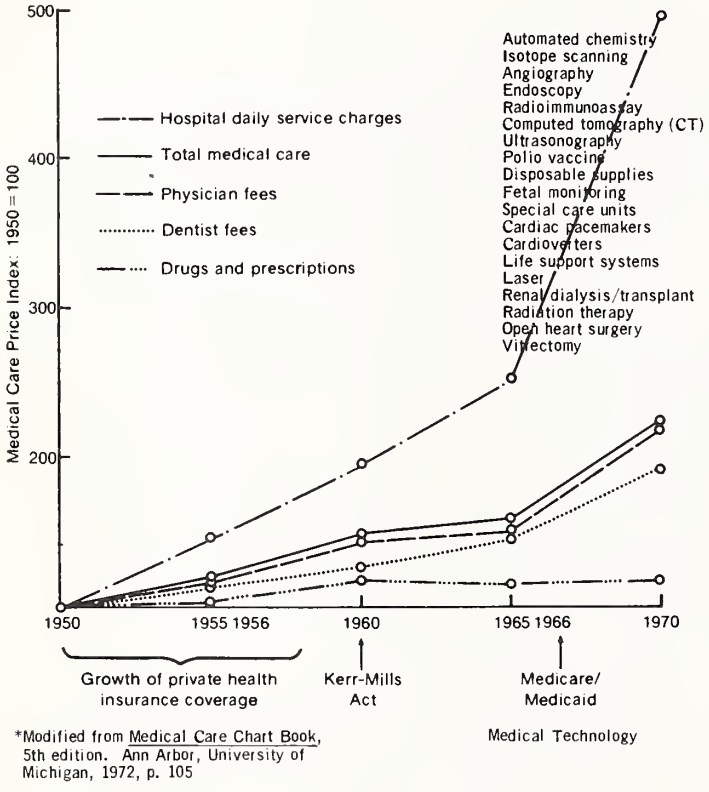
[1] *Medical Technology: The Culprit Behind Health Care Costs?* Proceedings of the 1977 Sun Valley Forum on National Health. Washington, D.C., DHEW Publication No. (PGS) 79-3216, 1977.

Table 1
Technological Advancements

Diagnosis	Prevention	Survival	Disease Management	Cure
Automated chemistry	Polio vaccine	CCU	Inhalation therapy	Total joint replacement
Isotope scanning	Influenza vaccine	ICU	Laser therapy	Microsurgery
Physiological monitors	Rabies vaccine	EMS	Immunosuppression	Laser therapy
Angiography	Pneumococcal vaccine	Ventilation therapy	Renal dialysis	Open heart surgery: valve replacement coronary bypass
Endoscopy	Measles vaccine	Cardiac pacemaker	Cardiac pacemaker	Renal transplant
Radioimmunoassay	Rubella vaccine	Cardioversion equipment	Radiation therapy	Cardiac transplant
Amniocentesis	Meningococcal vaccine	Intra-aortic circulatory support systems	Cardiopulmonary bypass equipment	Radiation therapy
Computed tomography (CT)	Disposable supplies/equipment		Endoscopy	Vascular graft materials
Ultrasonographic diagnostic equipment	Contraceptive devices		Ultrasound therapy	Vitrectomy equipment
	Amniocentesis			
	Fetal monitoring			

Figure *

Relative Increase in selected components of the Medical Care Price Index 1950-1970[10]



*Modified from Medical Care Chart Book, 5th edition. Ann Arbor, University of Michigan, 1972, p. 105

Among the *diagnostic technologies,* the superstars are difficult to select but *computed tomography* (CT) and *radioimmunoassay* won Nobel prizes for their developers. In the area of *prevention,* polio vaccine virtually has eliminated the disease while disposable equipment and supplies probably have prevented uncalculable numbers of cases of serum hepatitis and nosocomial infections. The *survival technologies* include the various specialized care units in hospitals (intensive care units, coronary care units, and others) and the mobile intensive care units (Lifemobile) and their monitors, cardioverters and life-support systems such as pacemakers and ventilatory assistance devices.

The new technological advances in *disease management* are so overwhelming in importance as to escape the untrained eye of the laity or to be taken for granted. Renal dialysis, cardiac pacemakers, the cardiopulmonary bypass equipment (which made open-heart surgery feasible), cobalt therapy and the linear accelerator, the endoscopic equipment (which allows removal of tumors from the bronchi and from the gastrointestinal tract, from the stomach to the ampulla of Vater, and from the entire colon), and laser therapy (to control vision-threatening diabetic retinopathy and other ocular problems) are here to stay—thanks to their developers and to God.

Physicians nowadays tend to use the word "cure" with restraint, but the technological advances which effect "cures" are nothing less than minor miracles. Cardiac valve replacement and coronary bypass are almost pedestrian. Vitrectomy, with resultant partial or complete restoration of sight, is performed daily in some institutions, while total joint replacement (especially of hips) has unfettered the halt and relieved their suffering. Vascular grafts in the lower extremities have prevented inestimable numbers of amputations.

No compilation of technological benefits to the health of mankind can be complete without a cursory look at the advances in *health education* (table 2). The cardiopulmonary resuscitation (CPR) mannequin is a well-known example in this field.

Finally, the health care system of today and the future would be unmanageable without data banks and computer services which touch virtually every aspect of modern life. As medical knowledge, its discovery, and daily application becomes increasingly complex and voluminous, the health practitioner will depend more and more on computer applications to medicine.

Table 2
Health Education Technologies

Teaching machines
Computer-assisted educational programs
Audiovisual (slide cassette, programmed films)
Television – closed circuit in hospital OPD, schools
Educational films
Health education and management contracts
Behavior modification
Cardiopulmonary resuscitation manequins

MEDICARE/MEDICAID LEGISLATION

The Medicare/Medicaid legislation came into being in 1966 and about that time the hospital daily service charges took off in the MCPI like a rocket to the moon. Economists are inclined to say that this third-party payment mechanism was responsible for the rapid rise in the hospital costs. To some extent they are correct. With Medicare/Medicaid the elderly and the indigent, who quietly suffered and died at home, entered the hospital for diagnosis and treatment.

Hospitals were permitted to count house physician, intern, and resident salaries in their daily costs, so the "slave-status" of the graduate physician changed to that of paid employee. Internships disappeared, emergency room (ER) visits increased and the threat of medical malpractice suits became a reality. Hospitals then employed career emergency service specialists to man the ERs and full-time trained specialists in surgery, medicine, obstetrics, gynecology, pediatrics, and medical education to run those departments. None of these added costs had any relationship to technology.

But—the outburst of technological advances into clinical utility was certainly encouraged by third-party payment. Renal dialysis/renal transplantation was a program which lay dormant until 1972 when enactment of Public Law 92-603, Sec. 2991, extended Medicare coverage to any individual under 65 years of age who is "medically determined to have chronic renal disease and who requires hemodialysis or renal transplantation for such disease." The costs of this end-stage renal disease program are as follows:

Year	Cost	Number of Patients
1978	$592.1 *million*	40,685
1980 (est)	$1.6956 *billion*	49,802
1983 (est)	$2.6743 *billion*	59,391

The 1978 figures represent approximately $15,000 per patient per year while the estimated 1983 cost per patient will be almost $46,000. The natural question to be asked is whether expenditure of this amount of money for a single disease entity among a tiny segment of the U.S. population (0.02%) is worthwhile. The individual physician whose patient needs dialysis and transplant cannot answer that question for the nation.

IS TECHNOLOGY THE ONLY PROBLEM?

The mere existence of new technologies is obviously only a part of the "problem." Along with them came the development of essential or concomitant ancillary services and personnel. And also came the programs of professional education for physicians to make them qualified to utilize the new technologies. Transplant surgeons, nephrologists, endoscopists, ultrasonographers, radiation therapists and microsurgeons did not drop from the trees. There had to be vast programs of specialized training and education and incentives to learn the application of the new technologies and then to implement their use into community health care.

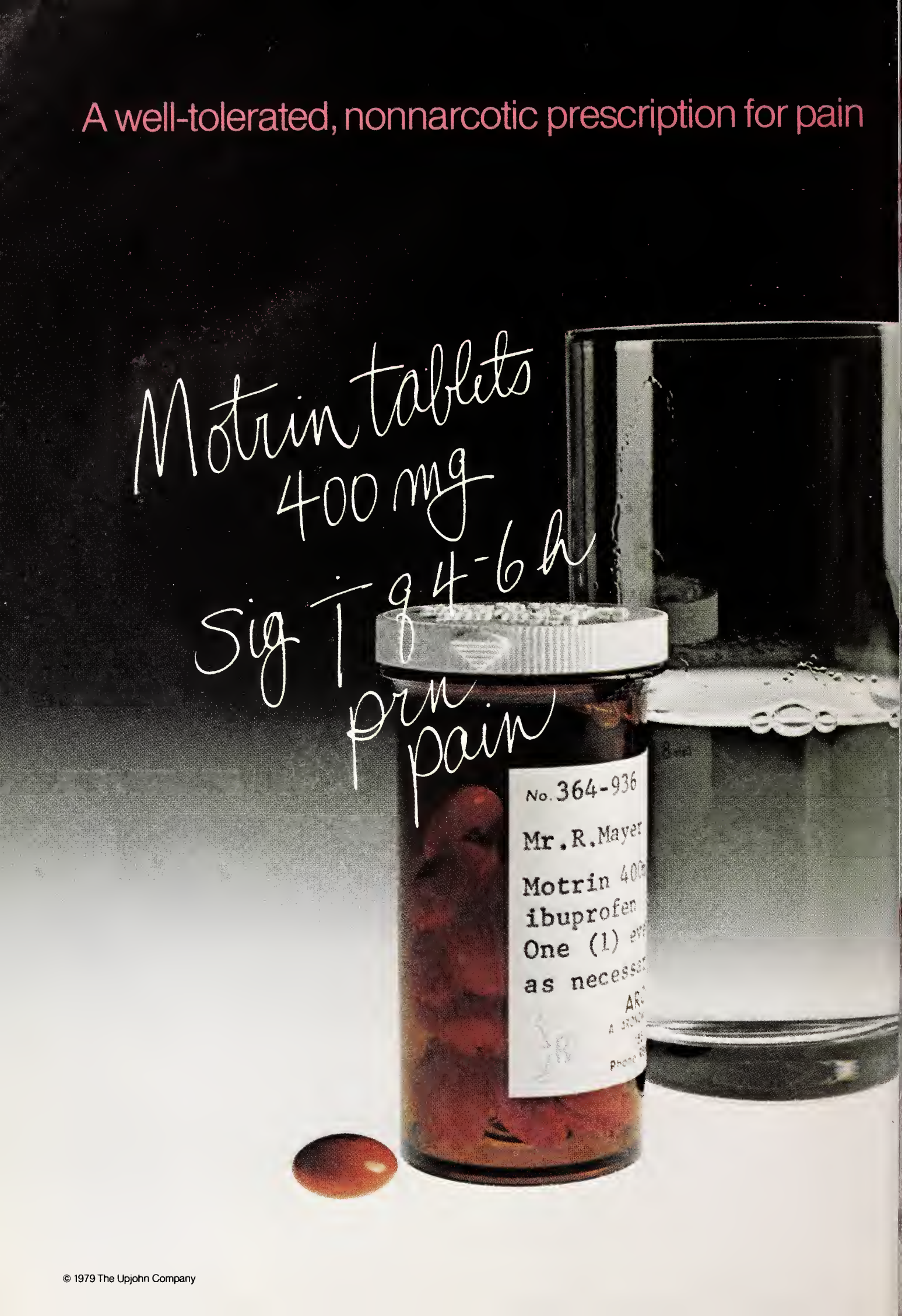
Is it fair now for the health planners to cry foul because the technologies are being used, are expensive and are adding to the nation's health care costs? Not at all! Is it fair to expect the physicians and surgeons, who are specially trained to understand and utilize expensive technologies for the benefit of patients who need them *not* to do so? Is it logical to dangle accurate diagnosis, prevention and disease management and even cure before the public and not expect them to demand them? Who can decide to whom survival technology should and should not be applied?

The complainers about the cost of health care must start with an earlier question. Should new technologies be developed and applied or should they remain dormant in the fertile brains of future Nobel prize winners or on the shelf and not utilized? If technology is available it will be used and so it should be. The scientists who split the atom where not responsible for the horror of Hiroshima—the politicians were. The developers of the CT scanner won a Nobel prize yet their invention has become the symbol of "wasteful expenditure" according to health planners.

Technology does indeed add to the costs of health care. The answer in America is not to *prevent* the development or utilization of technology but to preplan the method of payment of scientific applications and to utilize the techniques in a rational manner for the good of human kind.

A.K.

A well-tolerated, nonnarcotic prescription for pain



© 1979 The Upjohn Company

Motrin® now proved an effective analgesic for mild to moderate pain

otrin 400 mg provided greater relief of pain than did
opoxyphene 65 mg in controlled clinical pain studies.

ne after drug administration (hour)		.5	1	2	3	4
ean relief-pain scores* o. patients porting)	Motrin 400 mg ibuprofen	.89 (108)	1.25 (108)	1.36 (108)	1.28 (107)	1.19 (106)
	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
tistical significance		$p<0.02$	$p<0.01$	$p<0.05$	$p<0.02$	$p<0.002$

No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

trin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400 mg TABLETS
buprofen, Upjohn

ot a narcotic • Not addictive • Not habit forming
apid analgesic action • Indicated in acute and chronic pain
Vell tolerated. The most common side effect with Motrin
mild gastrointestinal disturbance.

lease turn the page for a brief summary of prescribing information.

pjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin.* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7444-4 November, 1979

Rx FOR DOCTORS
new, or established practice

Rx As experienced certified public accountants and consultants in the financial field, and having worked with doctors, we have the right prescription for your business needs.

Rx Pension, estate and tax planning for you and your family.

Rx Compliance with federal and state tax regulations are but a few of the services we offer.

Rx For financial success, you require liquidity, cash flow and after tax income.

Rx Proper business advice is our top priority.

Allow us to prescribe for you, the advantage of doing business with us.

For a consultation, please call

ROBERT L. FRIEDBAUER
Certified Public Accountant
127 Westminster Avenue, Bergenfield, N.J. 07621
(201) 385-0484

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Institute provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

Patients are returned to the referring physician after appropriate studies have been made, together with a complete detailed report of the findings of the Institute and its consultants and recommendations for therapy. Literature on request.

Fairmont Medical Bldg.
1424 Second Avenue
New York, New York 10021
PHONE: 744-5500

Surgical Management of Perforated Diverticulitis of the Sigmoid Colon

THOMAS LOGIO, M.D., EUGENE SALVATI, M.D.,
ROBERT RUBIN, M.D., EDSEL AUCOIN, M.D., Plainfield*

The morbidity, mortality, and recurrence rates of perforated sigmoid diverticulitis treated by Hartmann procedure are compared to treatment by three-stage colostomy, resection/anastomosis and colostomy closure. A review of the literature reveals a lower mortality and less frequent recurrence following the Hartmann procedure. This paper presents a series of Hartmann resections with analysis of the morbidity, mortality and recurrence rates.

The surgical management of acute perforations of the sigmoid colon secondary to diverticulitis is one of the most difficult and challenging problems of colon and rectal surgery. Although the primary goal is to excise the diseased bowel and to anastomose normal colon to rectum with low morbidity, low mortality, and no recurrence, the attainment of that goal often taxes the judgment of the most experienced surgeon. There are several choices of treatment: first, primary resection and anastomosis;[17] second, exteriorization of the bowel; third, a three-stage procedure which includes proximal colostomy followed some weeks later by resection and anastomosis; and finally closure of the colostomy; and fourth, a two-stage procedure, consisting of a resection and colostomy followed six weeks later by anastomosis. This is the Hartmann procedure. This paper discusses the relative merits of a Hartmann procedure over the three-stage approach for perforated diverticulitis.

MATERIALS AND METHODS

There were 26 patients who fulfilled the criteria of perforated diverticulitis. These criteria were left lower-quadrant pain, fever, leukocytosis, and a left lower-quadrant mass. Some patients had nausea, vomiting, diarrhea, or persistent sepsis; others had x-ray evidence of obstruction. All patients had perforation documented at laparotomy. Barium enema was avoided to prevent further contamination and sepsis.

Preoperatively, all patients were started on intravenous fluids and antibiotics. A Cantor tube was passed into the small bowel. Daily blood count and electrolytes were ordered. If there was any question of obstruction, daily obstructive series were obtained. When the patient's clinical condition improved, an intravenous pyelogram was ordered. Chemistry profile (SMA 12), chest x-ray, electrocardiogram, and coagulation studies were obtained preoperatively.

In the operating room, bilateral ureteral catheters and a Foley catheter were inserted under general anesthesia. The rectum was irrigated with saline to cleanse the bowel. A left paramedian incision was made, the abdomen entered, and complete exploration carried out with care being taken to examine the infected area last. The left peritoneal reflection was mobilized and special precaution was used to avoid injury to the ovarian or spermatic vein before identifying the ureter. The ureter was palpated easily and identified with the ureteral catheter in place. At this point, the inferior mesenteric vessels were isolated and ligated, avoiding high ligation in the male. The left ureter was palpated before transecting the vessels to avoid injury of the ureter. When the mesentery was divided, the right peritoneal reflection was mobilized and the phlegmon dissected free of its surrounding tissue. Anterior and lateral dissection were continued until an area

*Read before the Section on Gastroenterology and Proctology, 213th Annual Meeting of the Medical Society of New Jersey, May 14, 1979, Atlantic City. This study is from the Muhlenberg Hospital, Plainfield, where Dr. Logio is Resident in Colon and Rectal Surgery. He may be addressed at the hospital, Park Avenue and Randolph Road, Plainfield 07061.

"Although the morbidity rate following Hartmann procedure is considerable, the mortality and recurrence rates are much improved when compared to the three-stage procedure."

"When our study is added to a large collected series of patients who have undergone the Hartmann procedure for perforated diverticula, there were only eight deaths in a total of 121 patients. That is a mortality rate of only 6.6 percent."

of normal bowel below the peritoneal reflection was cleared for resection. At this point, a TA-55 auto-suture was applied to the distal rectum and an Ochsner clamp was applied proximally on the colon. The bowel was transected and the phlegmon removed. The bowel ends were painted with Betadine® and the rectal stump was allowed to sit in the pelvis while the descending colon was mobilized toward the splenic flexure enough to bring it through the incision as an end colostomy. There was minimal contamination since both bowel ends remained closed by the auto-suture. The abdomen was then closed with 2-0 wire and a Penrose drain and Saratoga sump tube were placed in the pelvis. The abdomen was irrigated with 0.5 percent kanamycin solution and the subcutaneous tissue was sprinkled with one gram of ampicillin powder. Skin clips were used to close the skin around the colostomy. The colostomy was then opened and matured with 3-0 Vicryl. A colostomy bag was applied immediately.

Postoperatively, the patient received intravenous fluids, and antibiotics, and Cantor tube suction until the colostomy began to function. The skin clips and Saratoga sump were removed in 48 hours. The Penrose drain and Foley catheter were removed in seven days. The patient usually was discharged from the hospital in seven to ten days. He was instructed to return in two weeks to our office. At that time, the patient was scheduled for an anastomosis six weeks postoperatively.

RESULTS

The morbidity for 26 patients included seven wound infections, four pelvic abscesses, four small-bowel obstructions, two fecal fistulae, two cases of ileus, two cases of pneumonia, two pulmonary emboli, one hepatitis case, and one case of urinary retention. There were two deaths for a mortality rate of 7.7 percent

DISCUSSION

Although early reports indicated a low mortality and low morbidity in the treatment of perforated diverticulitis,[1,2] more recent reports express discontent with the three-staged procedure as the treatment of choice for this condition. There have been mortality rates reported as high as 44 percent[4-6]. Other series report mortality rates in the range of 5 to 30 percent.

Morbidity as high as 50 to 60 percent has been reported.[15,20] Hospital stay in one series averaged 59 days (with a high of 76 days) for the three-staged procedure. This is compared to only 36 days for the Hartmann procedure.[16]

Recurrence rates also are higher in the three-staged procedure as compared to the Hartmann procedure. Levy *et al.* reported a 10 to 15 percent recurrence.[21] It is interesting that Classen in his retrospective study, reports three recurrences of perforation of diverticula following three-stage resection.[6] To date, there have been no recurrences reported following Hartmann resection for perforated diverticulitis.

There has been some question about the possibility of the rectal stump leaking following the Hartmann procedure.[22] It would appear unlikely to occur with the use of the auto-suture technique. Although the morbidity rate following Hartmann procedure is considerable, the mortality and recurrence rates are much improved when compared to the three-stage procedure. There are several explanations for these improved mortality and recurrence rates: First, the source of sepsis is removed early in the course of the disease. This prevents further infection and contamination and also prevents the formation of fistulae. Second, the anastomosis is performed under ideal circumstances. The bowel no longer is infected, nor is it edematous; a careful dissection can be carried out on the distal sigmoid to remove all distal diverticula. The anastomosis is less likely to leak when done under these circumstances and recurrences are less apt to occur when all distal diverticula have been removed. Third, since one operative procedure is eliminated, *viz.*, closure of colostomy, the morbidity and mortality of that operation (which is significant) are avoided.

When our study is added to a large collected series of patients who have undergone the Hartmann procedure for perforated diverticula, there were only eight deaths in a total of 121 patients. That is a mortality rate of only 6.6 percent. This figure compares favorably to all other series of patients with perforated diverticulitis. Therefore, it is our conclusion that the treatment of choice for perforated diverticulitis is the Hartmann procedure.

SUMMARY

Mortality, morbidity, and recurrences of three-staged procedure for perforated diverticulitis is compared to the mortality, morbidity and recurrences following Hartmann pro-

Mortality after Hartmann Resection for Diverticulitis with Perforation (Collected Series)

	No of Pts.	No of Deaths
Stauton (1962)[8]	5	0
Smiley (1966)[9]	3	0
Watkins (1966)[10]	7	0
Localio (1967)[11]	3	0
Roxburgh (1968)[12]	17	2
Whelan (1971)[13]	4	1
Miller (1971)[14]	5	1
Labow (1973)[15]	15	0
Sweatman (1977)[18]	2	0
Howe (1979)[7]	17	1
Nunes (1979)[16]	17	1
Present Series	26	2
Total	121	8

Mortality of Collected Series is 6.6%

Superior numbers refer to list of references

cedure. The result is a lower mortality rate and decreased length of hospital stay for Hartmann procedure. There have been no reported cases of recurrence following Hartmann procedure. The morbidity, however, remains as high as the three-stage procedure. The rationale for this superior result is discussed.

REFERENCES

1. Smithwick RH: Experiences with the surgical management of diverticulitis of the sigmoid. *Ann Surg* 115:969, 1942
2. Smithwick RH: Surgical treatment of diverticulitis of the sigmoid. *Am J Surg* 99:192, 1960
3. Rodkey GV and Welch CE: Surgical management of colonic diverticulitis with free perforation or abscess formation. *Am J Surg* 117:265, 1969
4. Byrne JJ and Garick EJ: Surgical treatment of diverticulitis. *Am J Surg* 121:379, 1971
5. Graves HA, Franklin RM, Robbins LB, Sawyers JL: Surgical management of perforated diverticulitis of the colon. *Am J Surg* 39:142, 1973
6. Classen NJ, Bonardi R, D'Mara CS, *et al:* Surgical treatment of acute diverticulitis by staged procedures. *Ann Surg* 184:582, 1976
7. Howe HJ, Casali RE, Westbrook KC, *et al:* Acute perforations of the sigmoid colon secondary to diverticulitis. *Am J Surg* 137:184, 1979
8. Staunton M: Treatment of perforated diverticulitis coli. *Br Med J* 1:916, 1962
9. Smiley D: Perforated sigmoid diverticulitis with spreading peritonitis. *Am J Surg* 111:431, 1966
10. Watkins G: Management of perforated sigmoid diverticulitis with diffusing peritonitis. *Arch Surg* 92:924, 1966
11. Localio S: Diverticular disease of the alimentary tract. I. The colon. *Current Problems in Surgery*. Chicago, Year Book Medical, (December) 1967
12. Roxburgh R: Emergency resection in treatment of diverticular disease of the colon complicated by peritonitis. *Br Med J* 3:465, 1968
13. Whelan C: Surgical management of perforated lesions of the colon with diffusing peritonitis. *Am J Surg* 121:374, 1971
14. Miller D: Perforated sigmoid diverticulitis: Appraisal of primary versus delayed resection. *Am J Surg* 121:536, 1971
15. Labow S: The Hartmann procedure in the treatment of diverticular disease. *Dis Col & Rect* 16:392, 1973
16. Nunes G: Hartmann procedure for complications of diverticulitis. *Arch Surg* 114:425, 1979
17. Madden J: Primary resection and anastomosis in the treatment of perforated lesions of the colon with abscess or diffusing peritonitis. *Surg Gynec Obstet* 113:646, 1961
18. Sweatman C: The surgical management of diverticular disease of the colon complicated by perforation. *Surg Gynec Obstet* 144:47, 1972
19. Colcock B: Surgical management of complicated diverticulitis. *N Engl J Med* 259:520, 1958
20. Nahrwold, D.: Diverticulitis with perforation into the peritoneal cavity. *Ann Surg* 185:80, 1977
21. Levy S: Surgical treatment of diverticular disease of the colon and evaluation of an eleven year period. *Ann Surg* 166:947, 1962
22. Goligher J: Treatment of carcinoma of the rectum. In: *Surgery of the Anus, Rectum and Colon,* ed. 2. London, Boillier, Tindall and Cassall, 1967, p. 625-626

only BRONKODYL®

brand of

theophylline, USP (anhydrous)

is 100% micro-pulverized, anhydrous theophylline, in capsules



- Bioavailability equal to an elixir[1]
- Achieves blood levels rapidly[1]

[1] Tinkelman, D.G., Carroll, M.S., Vanderpool, G., Jones, M.: The bioavailability of theophylline in elixir and micro-pulverized forms. Medical Challenge 10:24-26, 1978.

BREON

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016

BRONKODYL®

BRAND OF THEOPHYLLINE, USP (ANHYDROUS)

BRIEF SUMMARY: **Before prescribing, please consult complete prescribing information, a summary of which follows:**

INDICATIONS: For relief and/or prevention of bronchospasm associated with bronchial asthma, chronic bronchitis and emphysema.

CONTRAINDICATIONS: Hypersensitivity to any of its components.

WARNINGS: Theophylline should be used with caution in children and in others who are currently taking bronchodilator products, especially in rectal dosage form, which may contain theophylline or related drugs.

Status asthmaticus is a medical emergency. Addition of corticosteroids and other medications to bronchodilator therapy may be required.

Serum theophylline levels should be monitored at appropriate intervals for dosage adjustment. High serum levels of theophylline and resultant toxicity may occur with conventional doses in patients with decreased theophylline clearance as found with cardiac failure, liver disease, chronic obstructive pulmonary disease, and in geriatric patients.

Early signs of theophylline toxicity, such as nausea and restlessness may not occur prior to convulsions or ventricular arrhythmias. Pre-existing arrhythmias may be worsened by theophylline.

Usage in Pregnancy: Theophylline safety in pregnancy has not been established. Use of Bronkodyl during lactation or in women of childbearing potential requires that possible benefits of the drug be weighed against possible hazards to fetus or child.

PRECAUTIONS: Smokers may require larger doses of theophylline because of a shorter half-life in these patients.

Theophylline should not be administered concurrently with other xanthines.

Caution should be observed in patients with cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease, peptic ulcer, and in the elderly and neonates. Patients with congestive heart failure in particular may have markedly prolonged serum half-lives of theophylline.

ADVERSE REACTIONS: Most adverse reactions to theophylline are seen with serum levels exceeding the therapeutic range. *Gastrointestinal:* nausea, vomiting, epigastric pain, hematemesis, diarrhea. *CNS:* headache, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions. *Cardiovascular:* palpitations, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, ventricular arrhythmias which may be life-threatening. *Respiratory:* tachypnea. *Renal:* diuresis, albuminuria. *Other:* hyperglycemia, inappropriate ADH secretion.

Drug Interactions: Toxic synergism with ephedrine and other sympathomimetic bronchodilators may occur.

OVERDOSAGE Treatment:

A. If potential oral overdose is established and seizure has not occurred: 1) Induce vomiting. 2) Administer a cathartic. 3) Administer activated charcoal.

B. If patient is having a seizure: 1) Establish an airway. 2) Administer O_2. 3) Treat the seizure with intravenous diazepam, 0.1 to 0.3 mg/kg up to 10 mg. 4) Monitor vital signs, maintain blood pressure and provide adequate hydration.

C. Post-seizure coma: 1) Maintain airway and oxygenation. 2) If a result of oral medication, follow above recommendations to prevent absorption of drug, but intubation and lavage will have to be performed instead of inducing emesis, and the cathartic and charcoal will need to be introduced via a large bore gastric lavage tube. 3) Continue to provide full supportive care and adequate hydration while waiting for drug to be metabolized. In general, the drug is metabolized sufficiently rapidly so as to not warrant consideration of dialysis.

HOW SUPPLIED:

Bronkodyl 100 mg, brown and white capsules in 100's	Code 1831
Bronkodyl 200 mg, green and white capsules in 100's	Code 1833

Surgical Treatment of Intractable Vertigo

SIMON C. PARISIER, M.D. and
JOEL M.A. SHUGAR, M.D., New York

Intractable vertigo which is not controlled by medical management frequently can be relieved by appropriate surgery. The selection of a specific operative approach is dictated by the condition causing the vertigo, the definite identification of the pathological labyrinth, and the status of the auditory acuity in the involved ear. When useful hearing is present it should be preserved.

Persistent or recurrent episodes of vertigo can be disabling. Ordinarily, the various disorders that cause vertigo can be controlled by medications and are self-limiting. However, there is a relatively small number of patients who suffer from intractable vertigo and require surgery for symptomatic relief.

The decision to recommend surgery to relieve chronic vertigo is an arbitrary one that is based on multiple factors. The physician must consider the patient's life style, occupation, age, general medical condition, and emotional stability. The type of surgery performed for control of intractable vertigo will be determined by the specific disease process causing the vertigo, the definite identification of the labyrinth involved, and the status of hearing in the affected ear. Though it is essential to identify clearly the condition producing vertigo, this paper will not review specific diagnostic methods, a subject which has been well covered by other authors.[1,2] Rather, this presentation will describe the author's clinical approach to the actual management of patients with intractable vertigo.

SURGICAL MANAGEMENT OF INTRACTABLE VERTIGO WITH USEFUL HEARING

Endolymphatic Sac Decompression and Incision—Surgery is recommended for the relief of intractable vertigo in approximately 20 percent of patients with Meniere's disease. The choice of operative approach should be determined by the presence or absence of useful hearing in the affected ear. An endolymphatic sac decompression and incision is advisable for patients with useful hearing since this procedure does not jeopardize auditory acuity. However, in unilateral cases, when the hearing is impaired severely (i.e., discrimination score of less than 40 percent with a speech reception threshold lower than 60 db) a destructive labyrinthectomy would be the procedure of choice. One must be cautious in evaluating the cochlear function of a patient with Meniere's disease since this disorder is characterized by fluctuations in auditory acuity. Occasionally, following endolymphatic sac surgery, a gratifying improvement is noted. The patient's auditory function in the operated ear may go from non-useful level pre-operatively to a useful level post-operatively. The preservation of hearing in Meniere's disease is extremely important since the disorder eventually will affect the second ear in 15 percent of the patients. In fact, should an individual with bilateral Meniere's become profoundly deaf in the contralateral ear, the only residual functional hearing may be that which was preserved on the side initially involved.

The glycerol test is a useful means of inducing an upward

*Read before the Section on Otolaryngology, 213th Annual Meeting, the Medical Society of New Jersey, May 13, 1979, Atlantic City. Dr. Parisier is Professor of Clinical Otolaryngology, The Mount Sinai School of Medicine, New York. He may be addressed at the Mount Sinai Medical Center, One Gustave Levy Place, New York 10029. Dr. Shugar is Assistant Professor of Otolaryngology, Mount Sinai School of Medicine.

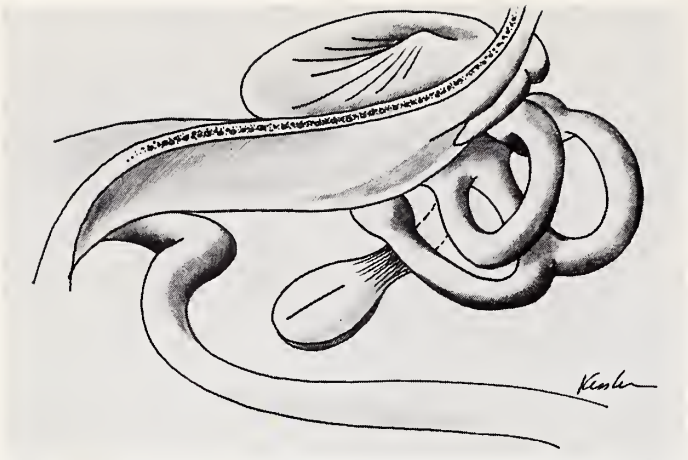


Figure 1—The endolymphatic sac is enclosed within the posterior fossa dura. Anatomically, it is adjacent to the inferior limb of the posterior semicircular canal.

fluctuation of auditory acuity in patients with endolymphatic hydrops.[3] The procedure attempts to determine the amount of cochlear improvement that may be achieved either by medical therapy or by surgery and is based on the presumption that glycerin increases the osmotic pressure in the blood. In patients with endolymphatic hydrops, glycerin causes a shift of fluid from the endolymphatic sac into the surrounding circulation which results in improved hearing, decreased tinnitus, and less aural fullness. The test is performed by obtaining a base line audiogram following which 1.5 gm of glycerin per Kg of body weight and an equal amount of normal saline are given by mouth. A few drops of concentrated lemon juice will make the viscid, sweet glycerol more palatable. Repeat audiograms are obtained for comparison at one, two, and three hours after the ingestion of the glycerin. A 20 db improvement in the pure tone averages or a 20 percent improvement in the discrimination score observed on the repeat tests is considered a positive test improvement. However, since approximately 30 percent of patients with Meniere's disease will have a negative glycerin test, the results of this test cannot serve as criteria for establishing the diagnosis of endolymphatic hydrops.

By performing the glycerol test preoperatively in patients being considered for surgery for Meniere's disease, the results of the test can be used to determine the choice of surgical technique. Occasionlly, following a glycerin test, a patient with poor hearing who initially was considered to be a candidate for a destructive labyrinthectomy may demonstrate a sufficient auditory improvement to encourage the physician to try to preserve the hearing by performing endolymphatic sac surgery.

The sac procedure is done under general anesthesia commencing with a simple mastoidectomy using a post-auricular approach (figure 1). The endolymphatic sac then is located within the posterior fossa dura in an area which is adjacent to the inferior limb of the posterior semicircular canal.[8] Its visualization requires that the bone overlying the lateral sinus and posterior fossa dura be thinned until it is translucent. Since exposure of the endolymphatic sac frequently will require bone removal medial to the facial nerve, the vertical portion of the facial nerve is visualized without uncovering its sheath. The definite localization of the facial nerve assures that it will not be inadvertently damaged. Exposure of the sac is accomplished by removing the thinned residual layer of bone which covers the posterior fossa dura in the area adjacent to the inferior limb of the posterior semicircular canal. During this dissection, the sigmoid portion of the lateral sinus may be exposed, and care must be taken not to damage this vascular structure. Generally, skeletonization of the semicircular canal to a blue line is not necessary. The sac appears as a subtle biscuit-like whitish thickening in the post fossa dura. The lateral wall of the sac is incised and a piece of silastic measuring 0.001 inch thick is inserted into its lumen. The post-auricular wound is then closed. The patient generally is discharged two days after surgery to convalesce at home. Postoperatively, the vertigo will be relieved completely in 65 percent of the patients. However, in the remaining 35 percent, the vertigo may be improved though not eliminated, or it may be unchanged. It takes two to three weeks for the hemotympanum to clear following surgery. After the middle ear changes resolve, the hearing either will be unchanged or improved compared to the preoperative levels.

House and others have recommended the insertion of a shunt tube from the endolymphatic sac to the subarachnoid space for the treatment of Meniere's disease.[9-11] The results achieved by this procedure are similar to those that have been reported for the endolymphatic sac decompression and incision. However, after the shunt type of procedure a cerebrospinal fluid leak and meningitis occasionally may occur. Therefore, though both the shunt procedure and the sac decompression and incision offer similar therapeutic benefits, the shunt procedure has the disadvantage of being associated with more significant complications.

Patients with Meniere's disease who have not been relieved by endolymphatic sac surgery and who have persistent intractable vertigo still may be treated by other surgical procedures. A variety of operative approaches which attempt to preserve hearing have been recommended for Meniere's disease. Some of these are as follows: ultrasound applied either to the round window or superior semicircular canal,[12,13] cryotherapy to the lateral semicircular promontory,[14] automatic repetitive sacculomotomy,[15] and selective vestibular nerve section.[16,17]

Selective vestibular nerve section—A variety of unilateral labyrinthine diseases exists which can produce intractable vertigo without severely affecting hearing acuity. Some of these disorders are unilateral Meniere's disease, traumatic labyrinthine injuries, complication of stapes surgery, post-tympanoplastic surgery which has eradicated infection and restored hearing, and benign paroxysmal positional vertigo. The patient's symptoms may be relieved by sectioning the vestibular nerve thus selectively dinnervating the affected labyrinthine end-organ while preserving cochlear function.

Vestibular neurectomy is indicated only when the vertigo cannot be controlled medically or when a simpler surgical procedure is not available or has failed previously. Thus, following stapedectomy, if persistent vertigo is present, an attempt to correct the problem should be made by exploring the middle ear, looking for a perilymph leak, and evaluating the position and length of the prosthesis.

Following section of either the vestibular nerve or a labyrinthectomy, the patient will experience persistent vertigo. The preoperative caloric examination will indicate the functional status of the affected labyrinth and is a good indicator of the severity of the vertigo that can be expected postoperatively. When the labyrinth is hypoactive preoperatively, the vertigo can be expected to be relatively mild after surgery. If the labyrinth is non-reactive and does not respond to massive ice water caloric stimulation, it cannot be incriminated as being the cause of the vertigo. The vestibular evaluation is facilitated by using electronystagmography

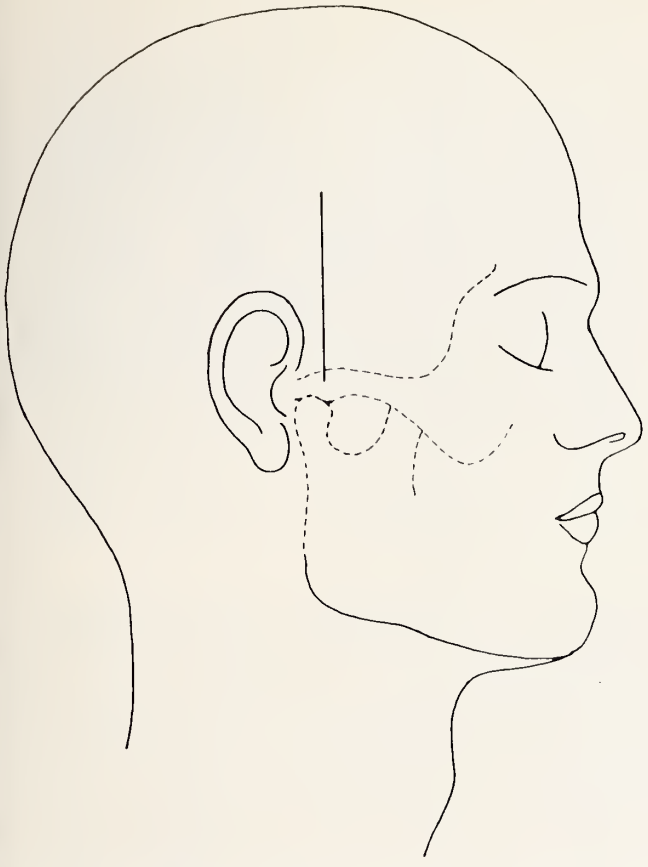


Figure 2—The middle cranial fossa is approached through a craniotomy in the temporal squama.

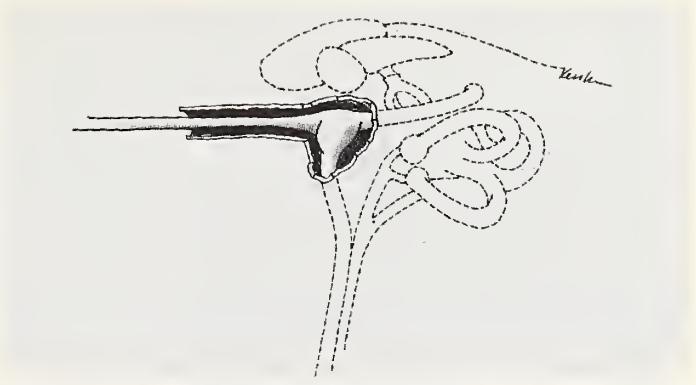


Figure 3—The dura is elevated from the petrous surface of the middle cranial fossa. The greater petrosal nerve is identified and it is traced back to expose the geniculate ganglion and the internal auditory canal.

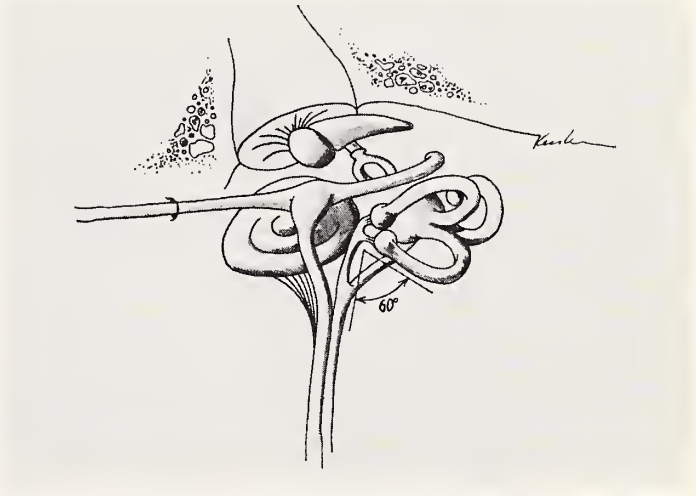


Figure 4—The bony arcuate eminence over the superior semicircular canal is thinned to a blue line. The internal auditory canal forms a 60 degree angle with the superior semicircular canal. By drilling within this angle and medial to the geniculate ganglion, the dura of the internal auditory canal can be exposed.

which will permit the measurement of spontaneous nystagmus. Using this recording method, the examiner can evaluate whether any underlying spontaneous nystagmus has contributed to the induced nystagmus produced by caloric stimulation of the labyrinth. For the caloric test, the patient is positioned with eyes closed and any spontaneous nystagmus is recorded. The calorically induced nystagmus is then corrected by the amount of spontaneous nystagmus observed.

After surgery, the vertigo gradually will diminish as the central nervous system compensates for the unilateral loss of vestibular function. Activity within the limits of tolerance should be encouraged. Occasionally, the patient may be left with a very disturbing feeling of chronic disequilibrium. Older people with associated central nervous system or visual disorders may not achieve adequate compensation. Additionally, patients with little motivation to resume a normal active life may focus their attention on the residual disequilibrium and remain dissatified with the results of surgery.

At surgery the vestibular nerve can be exposed and sectioned without sacrificing hearing by using the middle cranial fossa approach to the internal auditory canal as described by House[18] and Fisch.[19] A vertical skin incision eight to nine cm in length is made slightly anterior to the tragus, beginning at the level of the zygoma, and extending superiorly (figure 2). The temporalis muscle is incised and retracted to expose the temporal squama. A rectangular bone flap then is removed and the underlying dura carefully elevated. The greater petrosal nerve and the arcuate eminence are identified. Using a drill with diamond burrs and suction irrigation, the greater petrosal nerve is dissected posteriorly to the geniculate ganglion (figure 3). Posteromedially to the ganglion, the superior semicircular canal is identified and is skeletonized until an endosteal blue line is visible. The internal auditory canal is exposed by drilling anterior to the superior semicircular canal and medial to the geniculate ganglion (figure 4). Adjacent to the geniculate ganglion, the facial nerve and superior vestibular nerve exit through the fundal portion of the internal auditory canal and enter two distinct bony canals. The block of bone separating these two structures is the vertical crest ("Bill's Bar"). In this area, the facial nerve is located anterior to, and in a plane slightly above, the adjacent superior vestibular nerve. The dura of the internal auditory canal then is incised and its contents are examined. The inferior vestibular nerve will be observed coursing posteriorly and continuing below the horizonal crest. After definitely having identified the two divisions of the vestibular nerve, these fibers are sectioned. The operation is completed by sealing the fluid leak by inserting a free muscle graft into the internal auditory canal. The temporal squama bone plug is replaced and the skin incision closed. It is important to note that the hearing will have been preserved during the procedure only if the bony labyrinth has not been opened inadvertently and if the cochlear blood vessels and the cochlear nerve have not been traumatized.

Benign paroxysmal positional vertigo rarely is incapacitating. The condition has been attributed to a disorder of the posterior semicircular canal. The symptoms are reproduced during positional testing by reclining the patient in a supine position with the head hyperextended and turned so that the affected ear is dependent. Following a short latency period,

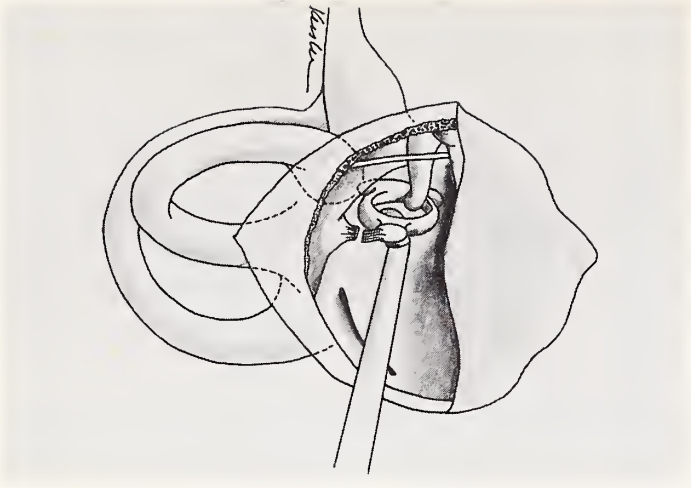


Figure 5—The transcanal destructive labyrinthectomy is performed by removing the stapes.

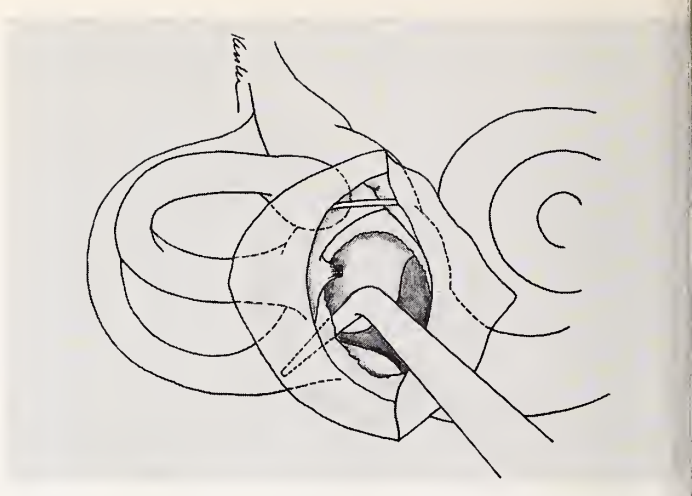


Figure 6—The incus is removed to gain better exposure. The bony covering between the oval and the round window is drilled away. A large right-angle hook is used to probe and destroy the vestibular end organs.

a rotatory nystagmus will be observed for several seconds. Since this nystagmus is fatigable, repeating the maneuver may not reproduce the nystagmus. Usually, benign positional vertigo can be controlled by vestibular head exercises and labyrinthine supressants. In recent years, sectioning of the posterior ampullary nerve to dennervate selectively the affected posterior semicircular canal has been recommended for the treatment of the individual who is disabled by this condition.[20] The procedure is performed by first elevating a tympanomeatal flap. The posterior ampullary nerve is exposed as it courses from the internal auditory canal to the ampulla of the posterior semicircular canal. By drilling in the sinus tympani area adjacent to the round window membrane, the nerve is visualized and cut. The surgery is completed by replacing the tympanic membrane and packing the ear canal. If the operation is successful, the positional vertigo will not occur and the patient's hearing should be preserved.

SURGICAL MANAGEMENT OF INTRACTABLE VERTIGO WITH NO USEFUL HEARING

Intractable vertigo caused by a unilateral labyrinthine disorder and an associated loss of hearing can be relieved surgically by destroying the affected vestibular end-organ.[21-24] However, prior to performing a destructive labyrinthectomy, the physician must have diagnosed the process causing the vertigo and also must have eliminated such disorders as acoustic neuroma or luetic labyrinthitis. When presented with a history of hearing fluctuations the destructive procedure should not be performed if a possibility exists that the auditory function might be improved by medications or by spontaneous recovery. A careful assessment of vestibular function should be completed pre-operatively by performing caloric tests to determine the functional status of the labyrinth in question. If it is observed that massive ice water stimulation fails to produce a labyrinthine response, then it must be assumed that the labyrinth in question is not capable of causing vertigo and a labyrinthectomy or a vestibular nerve section is contraindicated.

A transcanal labyrinthectomy is a simple operative procedure which is the treatment of choice for most patients with intractable vertigo caused by unilateral Meniere's disease, complications of stapedectomy, or traumatic middle ear injuries. The surgery is performed under general endotracheal anesthesia for, if the patient were awake, the destruction of the membranous labyrinth could cause uncontrollable vomiting. The operative approach is similar to that performed for stapedial surgery. A tympano-meatal flap is elevated. The posterior canal overhang is curetted away (figure 5). In order to obtain better exposure, the incus is either rotated into the epitympanum or removed. A stapedectomy is performed. Next, a small cutting burr is used to remove the bone between the oval and round windows. A large right-angle hook, inserted through the promontory defect into the vestibule is used to remove the utricular macula. The opening of the ampullated ends of the three semicircular canals are probed in an attempt to disrupt their cristae (figure 6). The cristae of the posterior canal which is located at the level of the round window may be difficult to probe and is not destroyed easily. As a result, occasionally, the labyrinthectomy might not be totally effective and the vertigo may persist postoperatively. The vestibule is sealed by filling the defect in the promontory with either fat or connective tissue. Traumatic neuromas may arise from the damaged neurons in the vestibular sensory organs which may cause recurrence of the vertigo. Therefore, if vertigo recurs or persists after this type of surgery, the functional status of the labyrinth in question should be evaluated by performing a caloric examination. When this test does not elicit a response, it can be assumed that vestibular symptoms are due to other causes, i.e., incomplete central compensation or involvement of the contralateral ear. However, when vertigo persists following an attempted labyrinthectomy, a response to caloric stimulation in the operated ear indicates that there is residual labyrinthine function which could be producing this discomfort. In such cases, the symptoms can be relieved by completely destroying the remaining labyrinthine function.

A transmastoid labyrinthectomy is an alternative technique which permits a more complete ablation of the membranous vestibular labyrinth.[25] Using a post-auricular approach, a simple mastoidectomy is performed. In order not inadvertently to damage the facial nerve, it is carefully identified. The incus is removed to facilitate the visualization of the horizontal segment. The three semicircular canals are drilled away and their respective cristae ampullaris are removed (figure 7). By following these structures, the vestibule is identified and the posterior portion is opened widely to permit the removal of the ultricular and saccular macula (figure 8). The procedure is completed by packing the vestibule with free muscle plugs and closing the skin incision.

The transmastoid labyrinthectomy affords the surgeon better exposure for the actual removal of the vestibular end-organs. Therefore, it is the procedure of choice when a

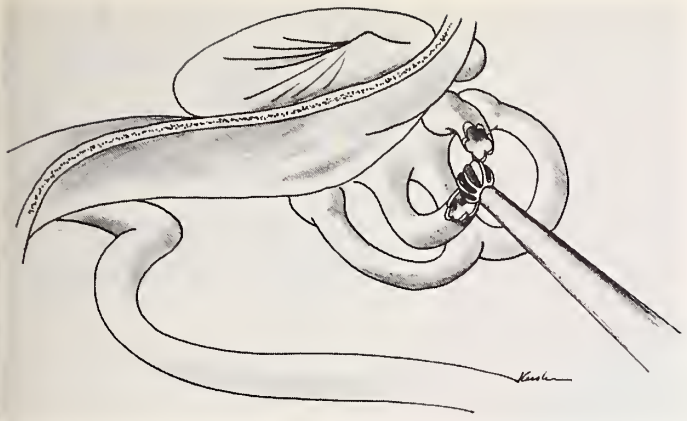


Figure 7—A simple mastoidectomy is performed. The three semicircular canals are identified and they are drilled away.

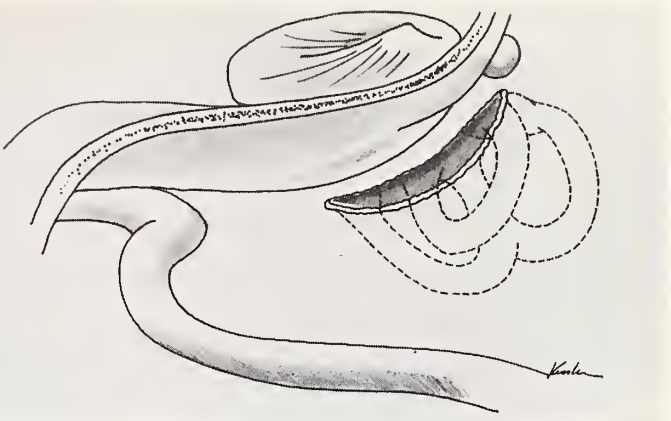


Figure 8—Dissection of the semicircular canals is completed by continuing below the facial nerve into the inner ear vestibule which is opened widely to allow removal of the utricle and saccule.

revision of a previous transcanal labyrinthectomy is required.

The approach for the transmastoid labyrinthectomy may be extended to permit the exploration of the internal auditory canal with sectioning of the superior and inferior vestibular nerves.[16,25] Exploration of the internal auditory canal has been recommended when there is a suspicion that a previously undetected acoustic neuroma may be present. In the occasional patient who is disturbed severely by tinnitus, the cochlear nerve may be sectioned in an attempt to improve this annoying symptom.

SUMMARY

Intractable vertigo is a disabling symptom that can be treated surgically when medical therapy has not proved effective. However, a guiding principle is that useful hearing must not be sacrificed. Thus, the selection of a specific operative approach is dictated largely by the need to preserve the level of hearing that is present. Additionally, the ear producing the vertigo and the etiology of the symptoms must be identified clearly before surgery is contemplated.

The patient suffering from intractable vertigo due to Meniere's disease who has serviceable hearing must be advised by the physician that the endolymphatic sac procedures and other surgical approaches which seek to preserve hearing and vestibular function are the treatment of choice. However, the patient also must be told that the vertigo may recur in a significant number of cases. Finally, individuals undergoing vestibular nerve section or labyrinthectomy should understand that the vertigo which is an expected sequela of the surgery will improve slowly as central compensation occurs. Additionally, it must be explained that following these procedures a chronic feeling of disequilibrium occasionally persists.

REFERENCES

1. Pulec JL: Meniere's disease: Results of a two and one-half year study of etiology, natural history, and results of treatment. *Laryngoscope* 72:1703, 1972.

2. Powers HN: Metabolic aspects of Meniere's disease. *Laryngoscope* 72:1716, 1972.

3. Klockhoff I: The effect of glycerin on fluctuant hearing loss. *Otolar Clin NA* 8:345, 1975.

4. Portmann G: Surgical treatment of vertigo by opening of the endolymphatic sac. *Laryngoscope* 75:1522, 1965.

5. Portmann M: Decompression and drainage of endolymphatic sac. *Arch Otolar* 97:125-28, 1973.

6. Shambaugh GE: Surgery of the endolymphatic sac. *Arch Otolar* 83:305, 1966.

7. Paparella MM, Hanson DL: Endolymphatic sac drainage for intractable vertigo (method and experiences). *Laryngoscope* 85:697, 1975.

8. Shea DA, Chole RA, Paparella MM: The endolymphatic sac: Anatomical considerations. *Laryngoscope* 89:88, 1979.

9. House W: Subarachnoid shunt for drainage of hydrops. A report of 146 cases. *Laryngoscope* 75:1547, 1965.

10. Shea JJ: Surgery of the endolymphatic sac. *Otolar Clin NA* 1:613, 1968.

11. Austin DF: Endolymphatic shunt operation. *Otolar Clin NA* 1:589, 1968.

12. Basek M: Ultrasound for Meniere's disease. *Arch Otolar* 97:133, 1973.

13. Giancarlo H: Ultrasound application to ampullated end of superior semicircular canal for the treatment of Meniere's disease. Personal Communication.

14. Woolfson RJ: Labyrinthine surgery for Meniere's disease. *Otolar Clin NA* 6:131, 1973.

15. Cody DTR: The tack operation. *Arch Otolar* 97:109-111, 1973.

16. Glasscock ME: Vestibular nerve section. Middle fossa and translabyrinthine. *Arch Otolar* 97:112, 1973.

17. Fisch UP: Excision of Scarpa's ganglion. *Arch Otolar* 97:147, 1973.

18. House WF: Surgical exposure of the internal auditory canal and its contents through the middle cranial fossa. *Laryngoscope* 71:1363, 1961.

19. Fisch UP: Transtemporal surgery of the internal auditory canal. Report of 92 cases—technique, indications, and results. *Adv Otorhinolar* 17:203, 1970.

20. Gacek R: Transection of the posterior ampullary nerve for the relief of benign paroxysmal positional vertigo. *Am Otol Rhinol Laryngol* 83:596, 1974.

21. Lempert J: Lempert decompression operation for hydrops of the endolymphatic labyrinth in Meniere's disease. *Arch Otolar* 47:551, 1948.

22. Schuknecht HF: Ablation therapy for the relief of Meniere's disease. *Laryngoscope* 66:859, 1956.

23. Cawthrone T: Membranous labyrinthotomy via the oval window for Meniere's disease. *J Laryngol Otol* 71:524, 1957.

24. Armstrong BW: Transtympanic vestibulotomy for Meniere's disease. *Laryngoscope* 69:1071, 1959.

25. Pulec JL: Labyrinthectomy: Indications, technique and results. *Laryngoscope* 84:1552, 1974.

Angina freedom fighter...



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Wellcome

Cardilate® (erythrityl tetranitrate)
INDICATIONS: For the prophylaxis and long-term treatment of patients with frequent or recurrent anginal pain and reduced exercise tolerance associated with angina pectoris, rather than for the treatment of the acute attack of angina pectoris, since its onset is somewhat slower than that of nitroglycerin.

PRECAUTIONS: As with other effective nitrites, some fall in blood pressure may occur with large doses.

Caution should be observed in administering the drug to patients with a history of recent cerebral hemorrhage, because of the vasodilation which occurs in the area. Although therapy permits more normal activity, the patient should not be allowed to misinterpret freedom from anginal attacks as a signal to drop all restrictions.

SIDE EFFECTS: No serious side effects have been reported. In sublingual therapy, a tingling sensation (like that of nitroglycerin) may sometimes be noted at the point of tablet contact with the mucous membrane. If objectionable, this may be mitigated by placing the tablet in the buccal pouch. As with nitroglycerin or other effective nitrates, temporary vascular headache may occur during the first few days of therapy. This can be controlled by temporary dosage reduction in order to allow adjustments of the cerebral hemodynamics to the initial marked cerebral vasodilation. These headaches usually disappear within one week of continuous therapy but may be minimized by the administration of analgesics.

Mild gastrointestinal disturbances occur occasionally with larger doses and may be controlled by reducing the dose temporarily.

DOSAGE: Therapy may be initiated with 10 mg sublingually prior to each anticipated physical or emotional stress and at bedtime for patients subject to nocturnal attacks. The dose may be increased or decreased as needed.

HOW SUPPLIED: 10 mg chewable scored tablets, bottle of 100. Also 5, 10 and 15 mg oral/sublingual scored tablets in bottles of 100. 10 mg oral/ sublingual scored tablets also supplied in bottle of 1,000.

Also available: Cardilate®-P (Erythrityl Tetranitrate with Phenobarbital)* Tablets (Scored).

(*Warning—may be habit-forming.)

1. Taken sublingually, Cardilate® (erythrityl tetranitrate) begins to work within 5 minutes, eliminating or reducing frequency and severity of anginal pain for up to two hours.
2. Fear of pain, a major deterrent to achieving acceptable (and desirable) levels of activity, including sex, may be allayed with Cardilate. Effective prophylaxis and improved exercise tolerance help toward normalizing the lives of anginal patients.

Cardilate®
(erythrityl tetranitrate)

Current Stapedectomy Update

MILTON INGERMAN, M.D., New York

Stapedectomies are decreasing steadily but technique changes continue. The latest "small fenestra stapedectomy" reportedly yields fewer complications. Some surgical "do's and don't's" are presented to minimize postoperative problems. Also, non-surgical advances are presented: impedance audiometry, a valuable diagnostic tool, and sodium fluoride, a therapeutic measure to retard sensorineural progression.

INCIDENCE OF STAPES SURGERY

All of us who do ear surgery are aware of the dramatic drop in the number of stapedectomies during the past decade. According to a recent survey by the Collected Letters of the International Correspondence Society of Ophthalmologists and Otolaryngologists, the incidence of stapes surgery is down 50 percent from 1967.[1] This drastic reduction of cases is causing a serious problem in training residents and in keeping competent otolaryngologists proficient in stapes surgery.

HOW MUCH STAPES TO REMOVE?

During the past 25 years we have witnessed evolution in surgery for otosclerosis from Lempert's fenestration of horizontal canal (where the stapes was avoided completely) to Rosen's needle mobilization of the stapes, to Shea's total stapedectomy using vein graft and polyethylene tube replacement. Today's controversy is between total footplate removal versus partial or "small fenestra stapedectomy," recently advocated by Gordon Smyth of Belfast.[2]

Smyth, in 1977, reported 800 stapedectomies comparing the small fenestra technique utilizing 0.3mm piston against that of total footplate removal and gelfoam-wire prosthesis. He found fewer fistulae, less sensorineural hearing loss, and better high-frequency results with the small-opening technique.[2]

Ted McGee of Oak Park, Michigan studied 142 cases comparing stainless steel piston to gelfoam-wire prosthesis and agreed with Smyth that better airbone closure and improved speech discrimination scores were obtained in the smaller fenestra technique.[3]

Schuknecht reports better high-frequency but poorer low-frequency results with the piston technique; he believes that the overall hearing outcome is comparable with the total footplate removal technique.[4] Regarding material with which to seal the oval window, Schuknecht recently compared gelfoam against fat and concluded that although fat results in a thicker membrane, the thin membrane closure formed by gelfoam is still quite adequate as an oval window seal.[5] It is interesting to note that Schuknecht finds that the majority of profound sensorineural losses due to granuloma or fistula are found in the wire-gelfoam cases and that when he operates on a pilot or other flying personnel, he prefers a wire-fat prosthesis.[6]

Alan Scheer continues to use teflon-wire piston and gelfoam in all of his stapedectomy cases regardless of the amount of footplate removed.[1,7] He reports an incidence of two fistulae in his last 500 cases and averages one profound sensorineural loss per 150 stapedectomies.

*Presented before the Section on Otolaryngology, 213th annual meeting of the Medical Society of New Jersey, May 13, 1979, Atlantic City. Dr. Ingerman is Attending Surgeon, Department of Otolaryngology, Manhattan Eye, Ear, and Throat Hospital, and Consultant, Rockefeller University, New York. He may be addressed at 118 East 60th Street, New York, N.Y. 10022.

WHICH PROSTHESIS TO USE?

Regarding which prosthesis to use, I recommend the technique which has worked well to date as long as hearing improvement results approximate 90 percent and the sensorineural deafness incidence is three percent or less.

The table illustrates the different stapes prosthetic preferences among some noted U.S. ear surgeons. Note that Bellucci, Farrior, and Schuknecht choose wire-fat, Goodhill and Mansfield Smith prefer wire on perichondrium, and McGee, Scheer, and Shambaugh prefer various pistons with gelfoam or tissue. Note also that at Manhattan Eye, Ear and Throat Hospital in New York there has been virtual abandonment of the wire-gelfoam prosthesis, increasing use of the piston, but the most popular prosthesis is still the wire-fat device.

Table 1

Stapedectomy Prosthesis Preferred by Some United States Otologists

Otologic Surgeon	*Preferred Method*
Richard Bellucci, N.Y.	Wire-fat prosthesis
J. Brown Farrior, Tampa, Fla.	Wire-fat prosthesis
Victor Goodhill, L.A.	Wire-perichondrium
T. Manfred McGee, Michigan	Stainless steel piston + gelfoam or fat
Harold Schuknecht, Boston	Wire-fat
George Shambaugh, Illinois	Teflon piston + fascia-seal
Alan A. Scheer, N.Y.	Teflon wire + gelfoam
Mansfield Smith, San Jose, Cal.	Wireloop and perichondrium

Manhattan Eye, Ear and Throat Hospital	*1977*	*1978*
Wire-fat prosthesis	74%	60%
Tef-wire prosthesis	21%	40%
Wire-gelfoam prosthesis	5%	0%

TECHNIQUES USED BY THE AUTHOR IN STAPEDECTOMY

1. Anesthetic—

a. I set up an intravenous infusion with 5 percent d/w to which I attach a 2cc syringe of Valium® (5mg/cc); for an apprehensive patient I give 2 to 3mg (0.5cc) slowly just prior to injecting the local anesthetic.

b. I use Xylocaine® 2 percent, mixing 9 cc with 1cc of epinephrine 1:1000 yielding a 1:10,000 solution; it is diluted further in hypertensives. Subcutaneous injection is made at the osseous-cartilagenous junction in three sites: postero-inferiorly, postero-superiorly, and antero-superiorly.

c. A sterile solution is used to flush Betadine® from the external canal where it was placed 15 minutes before the patient goes to the operating room. Aspiration is done under the operating microscope allowing this time for the anesthetic to take full effect.

2. Middle Ear Inspection—Following creation and elevation of a tympano-meatal flap I inspect for:

a. Dehiscence of the fallopian canal (which has a 5 to 25 percent incidencc, according to various authors).

b. Round window patency—it rarely is occluded by otosclerosis, but if so, may limit the success of the procedure.

c. Ossicular chain mobility—sometimes it appears that the malleus is fixed; after separating the incudo-stapedial joint, however, it will move freely. Also, unless the footplate is directly observed on palpating the stapes head, one might mistake movement due to a thin flexible crural arch for complete stapes mobility.

3. Fat graft is obtained from the earlobe and placed in sterile saline solution.

4. Following fracturing and removal of crura, mucosa is stripped from the footplate onto the promontory if possible, thereby reducing bleeding when the labyrinth is open and creating a drape to place over the subsequent fat graft.

5. Following removal of the posterior one-third to one-half of footplate:

a. I insert 0.6 mm diameter Teflon-wire piston prosthesis, usually 4.5 mm long so that 0.25 mm projects into the vestibule.

b. The oval window is sealed with two to three small strips of fat, which then are covered, if possible, with the reflected muco-periostium.

6. If more than one-half of the footplate is removed, I will use a wire-fat prosthesis measuring 4 to 4.25 mm in length.

7. When a thick footplate is present with no clear margins a drill is used to saucerize it, creating a blue center, picking a small opening in the center, which is enlarged with an oval window rasp, then inserting a wire-teflon piston.

A thick footplate with margins requires a small "pot-hole" inferiorly along the adjacent promontory—to fit a small hook since these footplates often become "floaters."

8. In order to reduce sensorineural loss the following recommendations will help avoid traumatizing the labyrinth:

a. Do not suction perilymph below the level of the vestibular margin.

b. Do not "fish" for fragments in the vestibule.

c. Do not aspirate vigorously for blood in the vestibule—there is no evidence that blood is harmful.

d. Do not handle fat graft roughly—animal experiments reveal that traumatized tissue causes hair cell damage.

e. Do not actively pump the reconstructed ossicular chain.

NON-SURGICAL ADVANCES IN OTOSCLEROSIS

1. **Diagnostic**—Impedance audiometry—an important tool

a. Tympanometry: a Type$_S$ represents a slightly stiff compliance which is expected in tympano-sclerosis, thick scarred tympanic membrane, otosclerosis, or other chain fixation. In reality, an A_S curve is found in only 40 to 50 percent of cases of stapes fixation. At Manhattan Eye, and Ear Hospital an A_S curve was found in only 40 percent, an A curve in 50 percent, and a type B or C curve in 10 percent of the cases of otosclerotic stapes fixation.

b. Acoustic or Stapedius Reflex is a fine test. By convention it is accepted that the reflex is reported on the side with the earphone. The reflex is absent if the earphone ear loss is greater than 25 to 30 db or the probe tip ear has an airbone gap greater than 10db. The stapedius reflex is usually absent bilaterally in a unilateral conductive deafness. At Manhattan Eye, Ear and Throat Hospital we found the reflexes absent in

"In a normal adult there is equilibrium between calcium deposition and loss from the labyrinth. In otosclerosis the resorption of calcium is greater than the deposition, resulting in porous or otospongeotic bone."

"The incidence of stapes surgery is decreasing steadily, creating difficulties training residents and in allowing practicing otolaryngologists to remain proficient."

"Recently some non-surgical advances in otosclerosis have developed. In the diagnostic area, impedance audiometry has become a very useful tool, especially the stapedius reflex and the tympanogram."

84 percent of the cases and present in 16 percent of the cases, for which there seems to be no good explanation.

c. Static compliance provides results so variable that it is not considered a useful test.

2. **Therapeutic**—Only sodium fluoride offers any promise as a therapy for otosclerosis. George E. Shambaugh, Jr., has been using sodium fluoride since 1964 claiming that it has been 80 percent effective in arresting progression of sensorineural deafness in otosclerosis.[8] Shambaugh teaches that the administration of sodium fluoride reverses the calcium loss from the cochlea. In a normal adult there is equilibrium between calcium deposition and loss from the labyrinth. In otosclerosis the resorption of calcium is greater than the deposition, resulting in porous or otospongeotic bone, a term which Shambaugh prefers to otosclerosis. When sodium fluoride is added, fluorapatite forms and is attached to and binds with the metabolically active labyrinth, reversing the calcium loss.

I personally have used sodium fluoride since 1971. My indications for its use were on patients with mixed or sensorineural hearing loss with any of the following:

(a) A soft vascular focus as determined by either surgical exploration or a positive Schwartze's sign.

(b) A history of progressive deafness in the third or fourth decade of life, with a strong family history of same.

(c) Surgically proved otosclerosis.

(d) Tomographic evidence of otosclerosis.

My therapeutic regimen consists of 20mg sodium fluoride twice a day following breakfast and dinner (lethal dose= 5000mg). Calcium gluconate 500mg also is given twice a day, before breakfast and dinner (not to be given together with fluorides in order to avoid formation of insoluble calcium fluoride in the gut). Also a multivitamin containing 400 i.u. of Vitamin D is prescribed daily to increase the calcium absorption.

I have had eleven patients on sodium fluoride (from nine months to seven and a half years) with encouraging results in about 80 percent of them—but also with a significant percentage of side effects; all reversible, however. Good results included stabilization of hearing in five, improvement in tinnitus in four, lessening of Schwartze's sign in four, and reduction of sense of ear pressure in two.

Side effects occurred in about one-half of my patients: stomach reactions in one patient (only after drinking alcohol), skin reactions in three patients, and four patients with joint pains and/or swelling, one severe enough to discontinue the treatment despite excellent response.

Currently I am using sodium fluoride only in highly-selected cases because of the difficulty in obtaining it, the burden of obtaining informed consent and setting up special records, convincing the patient's skeptical physician of its efficacy, and the significant incidence of side effects.

To date, however, we have nothing else to offer an otosclerotic with progressive sensorineural deafness, and despite all the difficulties, I will continue to use the sodium fluoride.

SUMMARY

The incidence of stapes surgery is decreasing steadily, creating difficulties training residents and in allowing practicing otolaryngologists to remain proficient.

Stapedectomy techniques have changed quite a bit since Rosen reported his mobilization in 1953, from Shea's total stapedectomy with vein graft and polyethylene tube replacement to the wire-fat or wire-gelfoam or wire-perichondrium prosthesis, to the stainless steel or teflon piston prosthesis with either gelfoam or tissue graft. Each technique has its proponent presenting arguments for his method.

Provided that the technique you currently are using yields successful hearing results about 90 percent of the time with three percent or less "dead ears," I recommend continuing with that method with which you are most familiar.

I present several suggestions in operating technique to help reduce adverse postoperative results.

Recently some non-surgical advances in otosclerosis have developed. In the diagnostic area, impedance audiometry has become a very useful tool, especially the stapedius reflex and the tympanogram.

Therapeutically, sodium fluoride has been used with some impressive results in arresting progression of sensorineural loss accompanying otosclerosis of the cochlear capsule. I have presented my indications and method for its use.

REFERENCES

1. Collected Letters of the International Correspondence Society of Ophthalmologists and Otolaryngologists, Series XXII, p. 153, October 31, 1977.

2. Smyth GD: The case for small fenestra stapedectomy. *Otolaryngol* 86:488-491, 1978.

3. McGee TM: Personal Communication.

4. Schuknecht HF: Personal Communication.

5. Schuknecht HF, Jones DD: Stapedectomy, postmortem findings. *Ann Otol Rhin Laryng* (Supp 55) 88:1-42, 1979.

6. Schuknecht HF: Personal Communication.

7. Scheer AA: Personal Communication.

8. Shambaugh GE, Jr and Petrovic A: Effects of sodium fluoride on bone. *JAMA* 204:969, 1968.

NOW a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE

COMPETITIVE RATES

OPEN ENROLLMENT JUNE AND DECEMBER

For More Information Contact

Donald F. Smith and Associates

Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield

Mesenteric Embolectomy

J. GERARD CROWLEY, M.D., and
ELPIDIO C. MARIANO, M.D., Piscataway

Embolization of the superior mesenteric artery is an important cause of severe bowel ischemia. If it is diagnosed early, embolectomy may result in a good outcome. The case presented was diagnosed twenty-four hours after onset and a prompt embolectomy was performed with a subsequent good result. The embolectomy was done through a peripheral branch of the superior mesenteric artery simplifying the procedure greatly.

Acute superior mesenteric artery occlusion results in a high mortality because undiagnosed bowel ischemia with subsequent perforation occurs. In the past, removal of a large amount of bowel was the treatment undertaken with a subsequent high morbidity and mortality[1]. The realization that embolic occlusion of the superior mesenteric artery was the most frequent single cause of acute occlusion led to the use of embolectomy with a marked improvement in mortality and morbidity[2]. The following case report is presented to demonstrate the use of a relatively simple approach to the reconstruction of the acutely occluded superior mesenteric artery.

CASE REPORT

A 66-year-old male was admitted with a history of sudden severe mid-abdominal pain which became generalized and persistent. Accompanying symptoms were vomiting and four episodes of diarrhea; the last one was bloody. He had a long history of atherosclerosis and coronary heart disease, underwent triple coronary bypass, bilateral carotid endarterectomy, and insertion of a permanent pacemaker. There was no history of peptic ulcer disease, diverticulosis, or colitis.

Physical examination on admission showed an elderly male in severe distress.—T 97.6, BP 160/110, P 108/min., R 24/min. The head and neck were normal. Tachycardia was present, but there was no gallop rhythm or murmur. Lungs were clear bilaterally. The abdomen was soft, not distended, and generally tender, but with no muscle guarding. Bowel sounds were hypoactive. Rectal examination revealed dark blood in the rectum, but no masses.

Laboratory examination—WBC 23.3, Hgb 15.7, Hct 47.5, BUN 28 mg/dl, creatinine 2.1 mg/dl, Na 104 mEq/L, K 5.3 mEq/L, Cl 106 mEq/L, amylase 92 units. X-rays of the abdomen did not show any gas in the small or large bowel.

A nasogastric tube was inserted; aspirated material revealed no blood in the stomach. Intravenous fluid was started and urine output was monitored. Sigmoidoscopy was negative to 25 cm; insufflation of air into the colon showed a normal gas pattern by x-ray. Repeat WBC six hours later was 26,000. In view of his previous history of cardiovascular disease, a diagnosis of mesenteric occlusion was considered.

At exploratory laparotomy, the entire small bowel was cyanotic and spastic except for eight inches below the ligament of Treitz. The colon was well perfused. Palpation of the superior mesenteric artery revealed an occlusion approximately two inches below its origin at the aorta. There were no pulsations in the mesenteric arcades of the small bowel. Embolectomy through the ileocecal artery was carried out using a Fogarty catheter. Pulsation then returned to the superior mesenteric artery and the small bowel was re-

* From the Department of Surgery, CMDNJ-Rutgers Medical School, Piscataway, where Dr. Crowley is Assistant Professor of Surgery and Dr. Mariano is a Fifth-Year Resident. Correspondence may be addressed to Dr. Crowley at the School, University Heights, Piscataway, N.J. 08854



Figure 1—Upper G.I. showing abnormal loops of small bowel with effacement of the mucosa consistent with ischemic changes. A previously inserted cardiac pacemaker is seen.

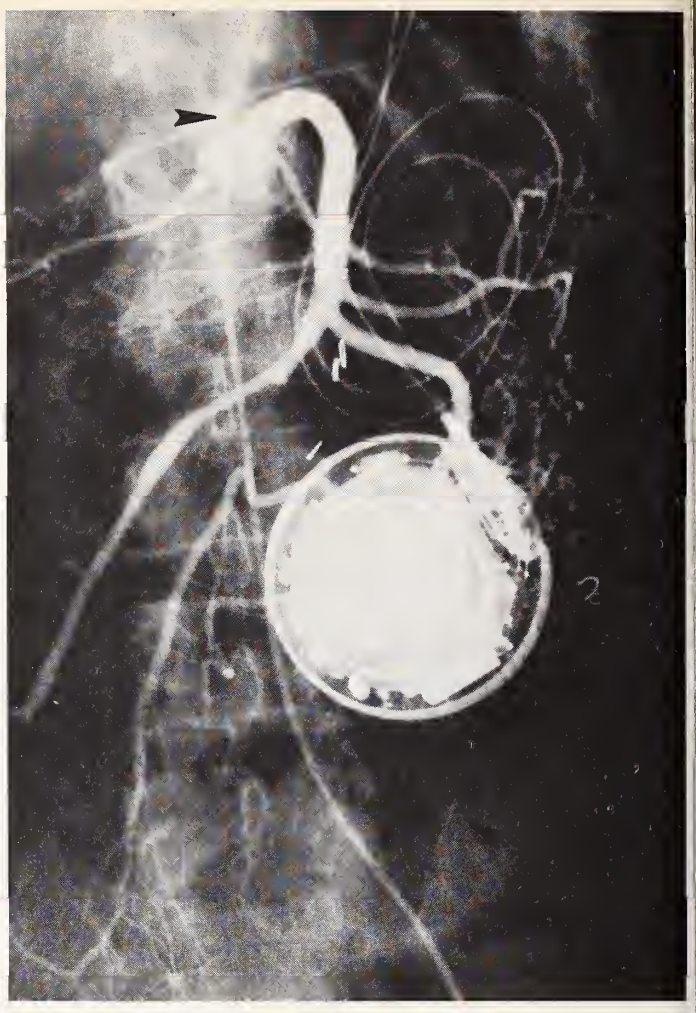


Figure 2—A selective superior mesenteric angiogram showing a patent trunk of the superior mesenteric artery with a loss of some jejunal branches.

vascularized, requiring no resection.

Anti-coagulant therapy was begun post-operatively. When oral feedings were started, he developed severe incapacitating watery diarrhea that persisted for two weeks in spite of medical treatment. Upper GI and small bowel series showed areas of narrowing and mucosal effacement involving the mid-jejunum (Figure 1). The patient was then placed on a malabsorption diet which seemed to control the diarrhea and he was discharged on the 24th post-operative day.

Two weeks later, he was readmitted with a two-day history of severe abdominal pains and anorexia. Examination revealed generalized wasting and some left-sided abdominal tenderness. Superior mesenteric arteriogram showed a patent superior mesenteric artery with some occlusion of a secondary branch medial to the ileocolic artery and hyperemia of the jejunum at the left upper quadrant (Figure 2). The mesenteric arcades filled well.

A technetium pyrophosphate scan was negative for bowel ischemia. A small bowel series showed that the stenotic bowel loops became larger compared to the previous study. Intravenous hyperalimentation was started, as he was unable to tolerate oral feedings and continued to experience recurrent abdominal pains. On the 21st hospital day, he developed severe abdominal pains and vomiting, accompanied by abdominal tenderness, guarding, and leukocytosis. Bowel perforation or reembolization was considered and exploratory laparotomy was carried out. Extensive adhesions involving the mid-jejunum were seen. The small bowel wall was thickened and indurated and covered by fibrinous exudate. The proximal jejunum was dilated. About 130 cm of small bowel was resected and primary anastomosis was carried out. Histopathological examination revealed diffuse mucosal ulceration, transmucosal cellular infiltrate, and fibrinopurulent serosal exudate. The lines of surgical excision were viable. He then had an uneventful post-operative recovery. His hyperalimentation was discontinued when he was tolerating regular diet and he was discharged on oral anticoagulants on the 18th post-operative day. On follow-up, he had gained 20 pounds in six months and was asymptomatic.

DISCUSSION

The key to the successful management of mesenteric arterial embolization is early diagnosis. Any patient who presents with the acute onset of abdominal pain and diarrhea and has an obvious source of, or history of, an embolus should be considered to have the condition, until proved otherwise. The white cell count usually is raised markedly to 20,000 and above. An angiogram of the mesenteric vessels

"... successful management of mesenteric arterial embolization is early diagnosis. Any patient who presents with the acute onset of abdominal pain and diarrhea and has an obvious source of, or history of, an embolus should be considered to have the condition..."

"The results of resectional therapy are poor. . . . Even though there has been delay in diagnosis, every effort should be made at revascularization in order to reduce the amount of bowel to be resected."

will confirm the diagnosis, but if there is delay in obtaining this, it is prudent to go ahead with laparotomy, when the diagnosis usually will be confirmed easily. In the typical case, the first twelve inches of the jejunum are well perfused, but there is ischemia of the rest of the small bowel and the right side of the colon. Palpation of the superior mesenteric artery will show a pulsation in the first two inches of the artery with evidence of occlusion below this, at the usual site of lodgement of the embolus.

Exposure of the ileocolic branch of the superior mesenteric artery with embolectomy is a far simpler procedure than exposure and arteriotomy of the trunk of the superior mesenteric vessel. There is a danger, however, of fragmenting the embolus and causing distal propagation; this may have occurred in our case, where some of the larger jejunal branches were shown to be occluded on subsequent angiography. Despite this we were able to provide adequate filling of the mesenteric arcades by collaterals. If it were suspected that a large jejunal branch remained occluded with significant distal ischemia, a second embolectomy easily could be done.

The results of resectional therapy are poor, with a mortality ranging between 80 and 100 percent[3]. Even though there has been delay in diagnosis, every effort should be made at revascularization in order to reduce the amount of bowel to be resected. In our case, there was a twenty-four hour delay from the onset of symptoms to the revascularization, and there was irreversible ischemic damage to the bowel; but this was not a full thickness infarction. At the second operation, it was easy to identify the areas where an adequate blood supply was present and the subsequent anastomosis following partial small bowel resection was uncomplicated.

Following revascularization, fifteen minutes should be allowed to observe the effects on the conditon of the small bowel. Any obviously infarcted bowel should be resected. If, as in our case, the bowel appears to be viable, then no resection need be done; the patient must be observed carefully in order to diagnose the development of an ischemic stricture should it occur. If the viability of the bowel is marginal, then a planned second-look procedure at twenty-four hours will help to determine the correct course of action.

With early diagnosis, and the adoption of a policy of reconstruction of the superior mesenteric artery rather than resection of the bowel alone, a higher salvage rate should result with lower morbidity. The embolectomy technique used in our case is simple and could be used by any general surgeon even if he usually does not undertake major vascular reconstructions.

SUMMARY

The management of mesenteric embolization is more likely to be successful if an early diagnosis is made and an embolectomy performed, rather than small bowel resection. In the case presented, an embolectomy was performed twenty-four hours following the onset of symptoms and, despite the onset of small bowel obstruction six weeks later requiring a partial small-bowel resection, the patient is now alive and doing well. If the operation is performed through a peripheral branch of the superior mesenteric artery, it is much simpler than reconstructing the trunk of that vessel.

REFERENCES

1. Ottinger LW, Austen WG: A study of 136 patients with mesenteric infarction. *Surg Gynec Obstet* 124:251-261, 1967.

2. Schennach W, Dorfmann A: Problem of acute obstruction of the mesenteric arteries. *Thoraxchirurgie* 20:457-462, 1972.

3. Carey JP, Stermmer EA, Connolly JE: Studies on acute mesenteric infarction. *Am J Gastroent* 53:552-557, 1970.

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.



They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.

The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

Spontaneous Myocardial Cholesterol Embolization

FRANZ PSCHIBUL, M.D. and
R. WENDELL WARD, M.D., Orange

This is a review of a well-established but almost forgotten entity, namely, spontaneous embolization of the myocardium by cholesterol micro-emboli. Such an event caused sudden death in an apparently healthy middle-aged man following strenuous physical exercise.

Spontaneous atheromatous embolization was first mentioned by Panum in 1862.[1] Since that time a number of publications have described such emboli causing renal hypertension, cerebral, myocardial, splenic, and retinal infarcts, peripheral gangrene, gastrointestinal ulcers, pancreatitis, myositis, cutaneous lesions and polyarteritis nodosa-like lesions. There has been little mention or documentation of myocardial cholesterol emboli which originated in a ruptured atheromatous plaque within a coronary artery. However, Leary, writing in 1934, felt that such a complication was a common event in older patients with coronary atherosclerosis.[2] He stated: "The formation of an atheromatous cyst, cavity, or abscess, as it used to be called, presents a new hazard. Located in the intima of a muscular artery which is constantly undergoing dilatation and contraction is a cavity filled with semifluid material. Rupture leads to obstruction of the lumen of the vessel near the point of rupture or to complete plugging of branches. The material is not broken up but acts as a semisolid mass. In most cases death is sudden, but time enough usually has elapsed before the death to permit clotting, either platelets or mixed clots arising."

Retan and Miller,[3] in discussing embolization of coronary arteries with atheromatous material state that the emboli arise either from the proximal aorta or from proximal portions of the coronary artery. Sudden death, angina and abnormal cardiograms resulted. Dock,[4] Zak and Elias[5] and Schornagel[6] make reference to complications of coronary atherosclerosis such as we will describe.

CASE REPORT

A 49-year-old male, weighing about 80 kg. and measuring 172 cm. in height, with no history of antecedent illness died suddenly after returning from his daily bicycle ride in a hilly area. Pertinent postmortem findings were pulmonary edema, minimal arteriosclerosis in the ascending aorta, and severe atheromatosis in the thoracic and abdominal aorta. The heart was normal in size and weighed 340 grams; the myocardium and heart valves were unremarkable. The coronary arteries were of average size and had extensive atheromatosis with minimal narrowing of the lumina. A brownish ulcerated atheromatous plaque was noticed in the intima of the main trunk of the anterior descending branch of the left coronary artery. The disrupted plaque was located in the intima just beyond the origin of the vessel, and it narrowed the lumen slightly at this site.

Multiple microsections were prepared from the wall of the left ventricle of the heart. Microscopic examination demonstrated scattered tiny cholesterol crystal emboli occupying the lumina of many small arterial tributaries within the myocardium. They appeared as bioconcave clefts as shown

*Dr. Pschibul is Chairman of the Department of Pathology and Dr. Ward is Attending Pathologist at The Hospital Center at Orange. Dr. Pschibul may be addressed at the hospital, 188 South Essex Avenue, Orange, NJ 07051.



Figure 1—Two small arterial branches (arrows) in myocardium contain cholesterol crystals (biconcave clefts) and atheromatous debris.

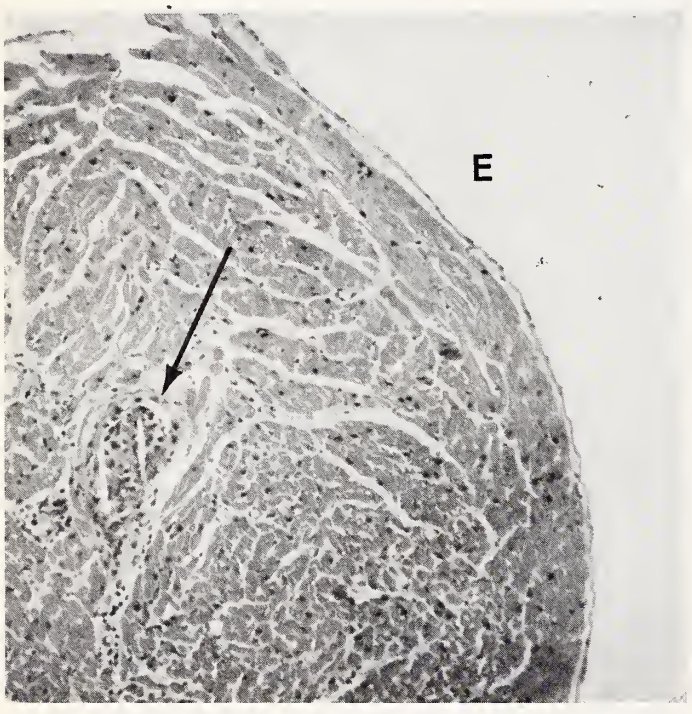


Figure 2—A small arterial branch (arrow) beneath endocardium (E) contains two cholesterol crystals.



Figure 3—Arterial branch occluded by atherogenic material and a cholesterol crystal with cellular infiltrate resembling vasculitis.



Figure 4—Longitudinal view of a small arterial branch showing perivasculitis and two intraluminal cholesterol crystals (arrows).

in figures 1 and 2. Some of the small branches containing emboli also had swelling of the adjacent endothelial cells. Other small branches occluded by similar crystals and atherogenic material showed edema in the perivascular zones with infiltration by round cells, suggesting a vasculitis or perivasculitis (figures 3 and 4). The myocardium showed interstitial edema and focal myofibrillar necrosis.

Sections of the anterior descending branch of the left coronary artery showed a fibrosed and disrupted wall with a broken-down atheromatous plaque with part of its contents in the lumen. The residual plaque and the material in the lumen consisted of atherogenic debris, red and white blood cells, cholesterol crystals, foam cells, and a rare multinucleated foreign body giant cell (figures 5 and 6). No other sources of atheromatous deposits were found on the mitral valve, in the proximal aorta or in the sinuses of Valsalva. The only site from which these cholesterol emboli could have arisen was the ruptured plaque in the left anterior descending coronary artery. The extensive myocardial microembolization caused acute left ventricular failure, pulmonary edema, and death.

DISCUSSION

Many years ago some authors felt that the complication of coronary atherosclerosis which we have described in this case was a fairly common event, particularly in the older patient. References to this complication in more recent publications are brief. Gill, McBride, and Dammin[7] report the case of an

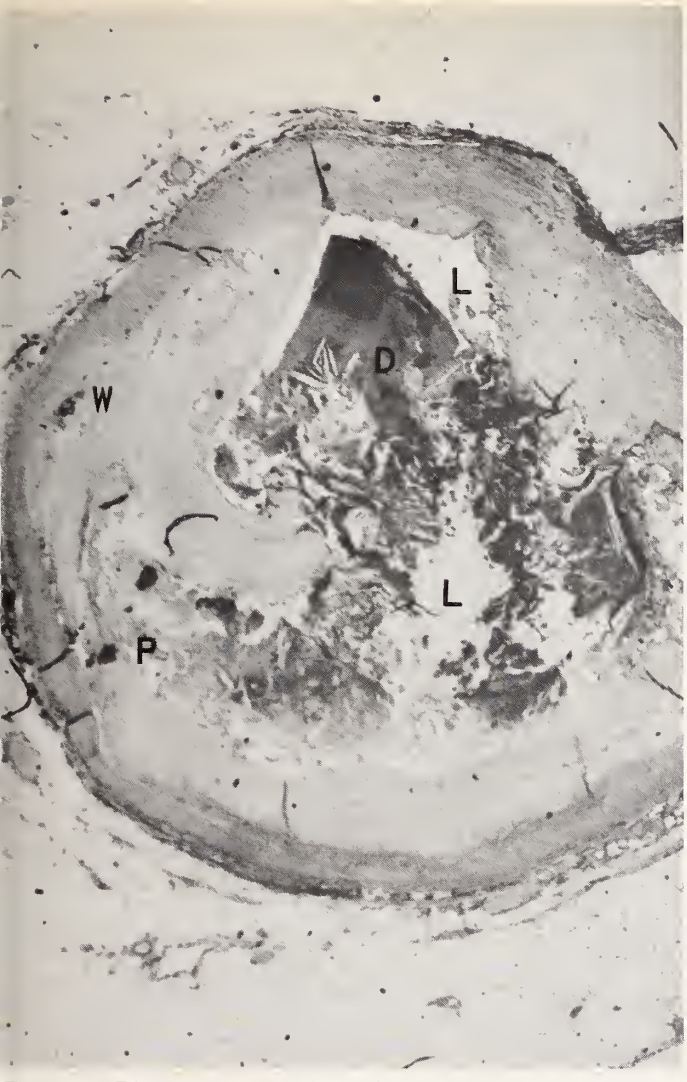


Figure 5—Fibrosed and partially disrupted coronary artery wall (W) with residual plaque (P) composed of amorphous atheromatous material and many cholesterol crystals. Debris (D) in Lumen (L).

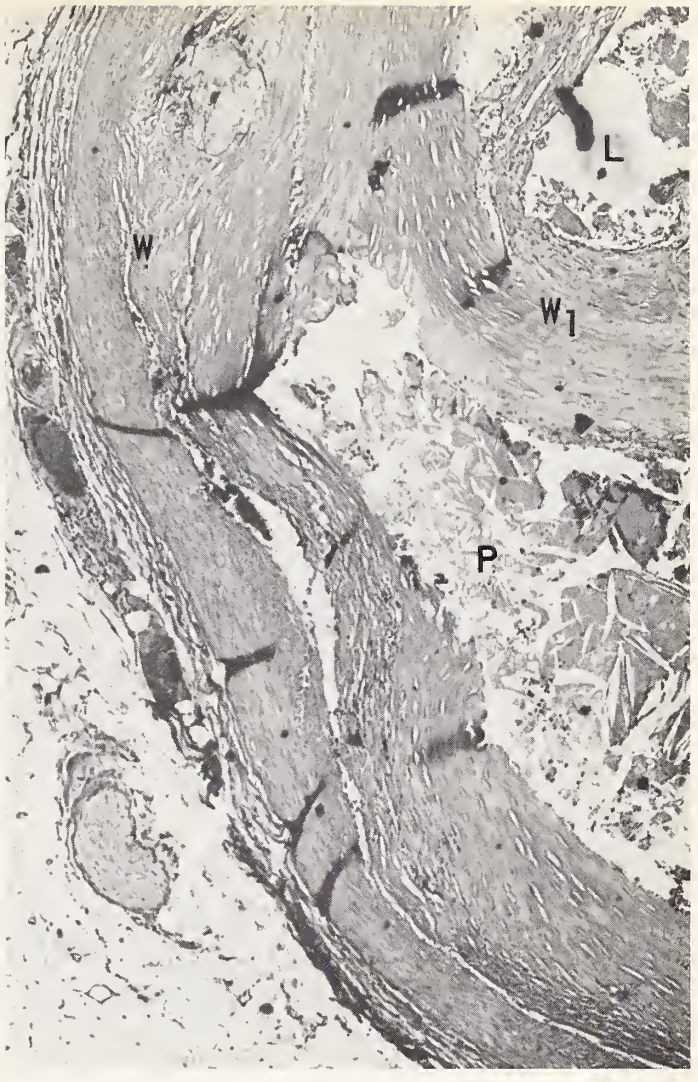


Figure 6—Higher magnification of arterial wall (W), part of it (W_1) projecting into lumen (L) and residual atheromatous plaque (P).

87-year-old man who developed congestive heart failure and pulmonary edema. Death occurred shortly after admission. Autopsy demonstrated several large ulcerating atheromata just above the aortic valve. Above each of the sinuses of Valsalva there were firm excrescences showing focal calcification, cholesterol deposition, and granular debris. The narrowed lumen of the markedly atherosclerotic left anterior descending coronary artery contained a recent embolus made up of amorphous granular eosinophilic material, cholesterol, and red blood cells. They state: "Above the occlusion there was no evidence of any ulceration in the coronary artery itself that could have acted as a source for the embolus."

Abrupt dissemination of cholesterol microemboli to the myocardium from an atheromatous plaque in a coronary artery is one cause of sudden cardiac death in persons afflicted with coronary artery atherosclerosis. It usually leads to sudden death because collateral circulation is poorly developed. Embolization is initiated during a period of increased cardiac output and accelerated cardiac rate in an individual with nonobstructive coronary atheromatosis. An atheromatous plaque in the extramural portion of a main coronary artery, which undergoes greater stress than most other muscular arteries, breaks down, ruptures and the atheromatous debris is then carried by the bloodstream to the myocardial microcirculation. According to Uys,[8] the vessels embolized most commonly measure 150 to 200 micra in diameter, the major factor being the size of the individual cholesterol crystals. If the number of crystal emboli is of sufficient magnitude, sudden cardiac death may occur. If only a few emboli disseminate, the result may be a ven-

"Above each of the sinuses of Valsalva there were firm excrescences showing focal calcification, cholesterol deposition, and granular debris."

". . . microemboli to the myocardium from an atheromatous plaque . . . is one cause of sudden cardiac death in persons . . . with coronary artery atherosclerosis."

tricular arrhythmia or symptoms suggesting angina pectoris, myocarditis, or a myocardial infarct. If a thrombus forms on the remaining surface of the ulcerated plaque and occludes the vessel, a myocardial infarct may result. Cholesterol embolization of the heart rarely is considered clinically because of the difficulty in making such a diagnosis. The demonstration of cholesterol microemboli in autopsy tissue requires very careful examination. This process should be considered as a distinct entity within the wide spectrum of atherosclerotic heart disease. It should be entertained as a possible clinical diagnosis and searched for diligently by the pathologist. Perhaps not every thrombus found on a ruptured atheromatous plaque in a coronary artery readily should be accepted as the sole and primary cause of death until the portion of the cardiac wall supplied by that diseased blood vessel has been examined carefully for the presence of atheromatous microemboli in the small arterial branches. Similarly, careful search for such emboli in the myocardium should be carried out in persons who died suddenly of arrhythmias. Important clues suspecting such an event are a grossly normal myocardium, relatively large and patent coronary arteries with atherogenic plaques in the extra-mural portions of the vessels, or plaques in the ascending aorta, including the aortic valve.

SUMMARY

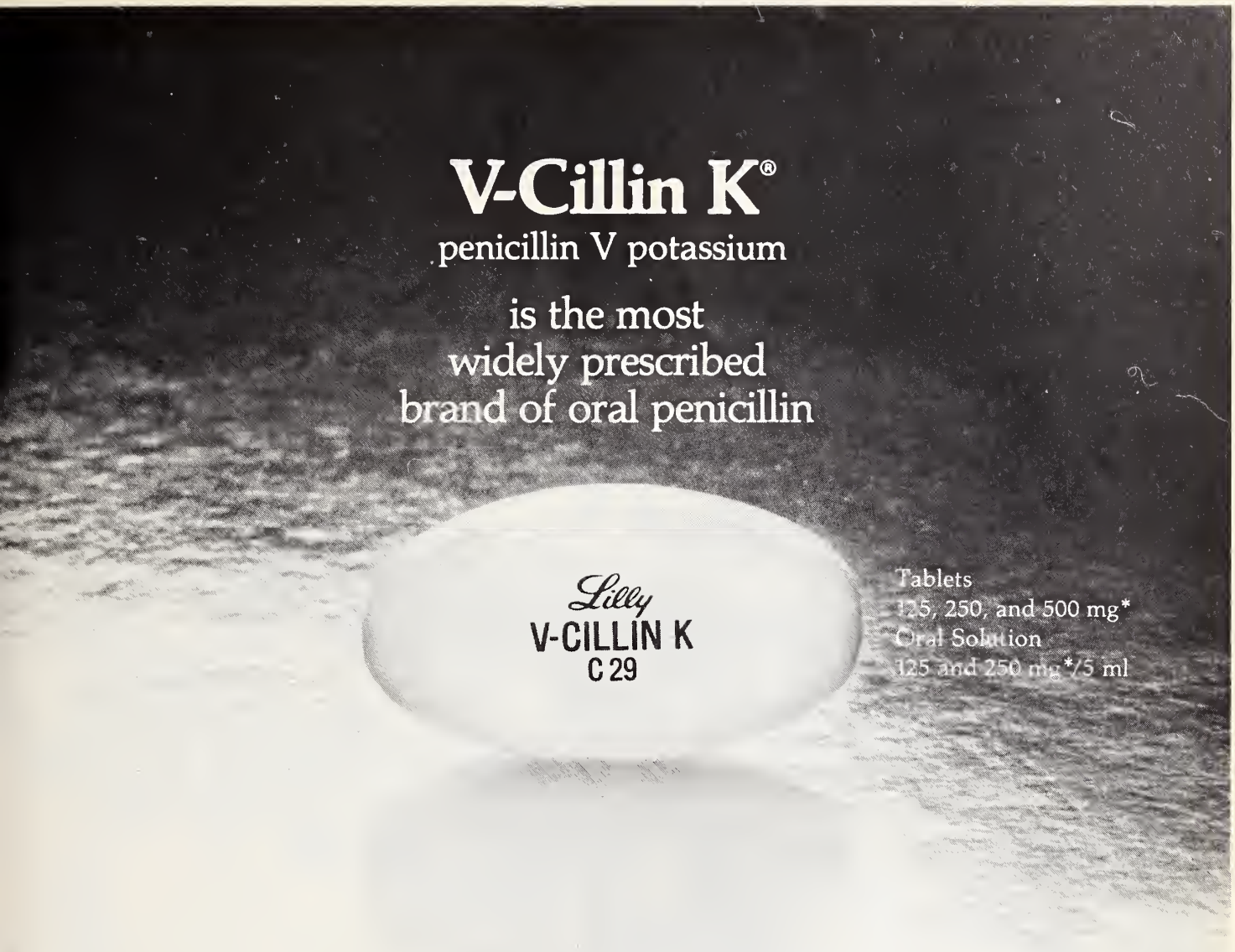
The entity of spontaneous myocardial embolization by atherogenic material is reviewed in conjunction with a case observed and described by us. The difficulty in recognizing such a disease process clinically and anatomically is stressed, and we are suggesting that it occurs much more frequently in our population than presently is realized, especially in view of the high incidence of cholesterol emboli in many other organs. Because of this diagnostic dilemma myocardial cholesterol embolization becomes almost a forgotten entity,

". . . careful search for such emboli [atheromatous microemboli] in the myocardium should be carried out in persons who died suddenly of arrhythmias."

and it is the reason that the current cardiology and pathology texts as well as reports in the literature place emphasis on the rarity of its occurrence. The symptomatology and consequences of myocardial embolization by atherogenic emboli is discussed and clues for suspecting and recognizing it clinically and anatomically are presented.

REFERENCES

1. Panum PL: Experimentelle Beiträge zur Lehre von der Embolie. *Arch Path Anat* 25:308-310, 1862.
2. Leary T: Pathology of coronary sclerosis. *Am Heart J* 10:328-337, 1935.
3. Retan JW and Miller RE: Microembolic complications of atherosclerosis. *Arch Intern Med* 118:534-545, 1966.
4. Dock G: Some notes on the coronary arteries. *Med & Surg Rep* 75:1-7, 1896.
5. Zak FG and Elias K: Embolization with material from atheromata. *Am J Med Sci* 218:510-515, 1949.
6. Schornagel, HE: Emboli of cholesterol crystals. *J Path Bact* 81:119-122, 1961.
7. Gill, TJ III, McBride RA, and Dammin GJ: Coronary embolism: Report of three cases. *Am Heart J* 56:878-889, 1958.
8. Uys CJ and Watson CE: Effects of atheromatous embolization on small arteries and arterioles. *S Afr Med J* 37:69, 1963.



V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

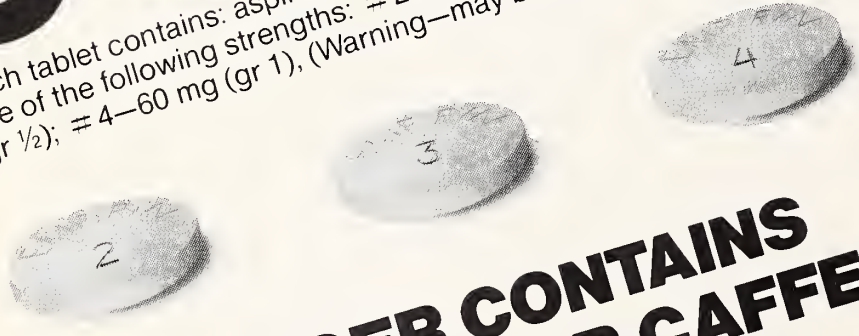
Eli Lilly and Company
Indianapolis, Indiana 46206

900416

~~EMPIRIN®~~
~~COMPOUND~~
~~C CODEINE~~
IS NOW
EMPIRIN®
C CODEINE
C-III



Each tablet contains: aspirin, 325 mg; plus codeine phosphate in one of the following strengths: #2—15 mg (gr ¼); #3—30 mg (gr ½); #4—60 mg (gr 1), (Warning—may be habit-forming)



NO LONGER CONTAINS PHENACETIN OR CAFFEINE.

ONE HUNDRED YEARS WELLCOME

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

REVIEW ARTICLE

Pneumonia: A Clinical Review

HEMANT H. KESARWALA, M.D., Edison

Pneumonia remains a problem in the daily practice of pediatrics. Its incidence, pathogenesis, and pathology are discussed. Diagnosis is discussed in detail and criteria for invasive procedures such as transtracheal aspiration and lung tap are defined. Details of treatment, prognosis, and prevention are included. Specific etiologic organisms are discussed individually.

Despite advances in medical science and a falling incidence of serious infectious diseases in general, pneumonia remains a problem in the daily practice of pediatrics. It is the single most common infectious cause of death in the pediatric age group.[25] In 1976, pneumonia was the primary cause of death of over 50,000 people and this figure has remained essentially unchanged. The following review will discuss specific etiologic agents and diagnosis. No attempt will be made to cover the subject comprehensively but the reader is referred to standard pediatric textbooks for additional data.

DEFINITION

Pneumonia is defined pathologically as acute inflammatory consolidation of alveoli or infiltration of interstitial tissues with inflammatory cells, or a combination of both.

INCIDENCE

The exact incidence of pneumonia in the pediatric age group is not known. For the general population it is 5.5 per 1000 population.[4] Pneumococcus is the single most important bacterial pathogen except in the newborn period and early infancy. Hemophilus influenzae is especially pathogenic in the first five years of life but its incidence decreases with increasing age. Staphylococcus aureus causes a devastating disease in infancy but it is an unusual pathogen in the older child except following viral influenza.

PATHOGENESIS

The lung normally is sterile. Microorganisms can gain access to the lung either via the airway (inhalation or frank aspiration) or the bloodstream. Pneumonia might be expected to be a more frequent occurrence, but, it is not because of the normal pulmonary defenses which include:

(1) The glottic reflex which helps to prevent aspiration into the tracheobronchial tree.

(2) The mucociliary blanket which removes particles from the airways. The ability of infectious aerosols to cause disease is related to their size; particles greater than 10μ are trapped in the upper airways. Those less than 0.2μ remain suspended in air and get in and out of the alveoli without causing pulmonary disease. Those particles between 0.2 and 6μ have the maximum potential to get trapped and cause disease. [9,10]

(3) The pulmonary alveolar macrophages remove foreign particles and organisms from the lungs.

(4) Secretory IgA binds with antigens on the mucosal surfaces and prevents their entry into the lung parenchyma.

Interference with any of these defenses may result in infection. The following are important predisposing factors:

*From the Department of Pediatrics, Rutgers Medical School, CMDNJ. When this study was made, Dr. Kesarwala was a Resident in Pediatrics at RMS and subsequent to that a Fellow in Infectious Diseases and Immunology at the same institution. He is now on the staff of the Department of Pediatrics of RMS and may be addressed there, University Heights, Piscataway 08854.

(1) Preceding viral infections involving both the upper and lower respiratory tract with resultant mucosal damage and increased fluid production.[16]

(2) Chilling which may interfere with ciliary action.

(3) Hypoxia may inhibit clearance of staphylococci from the lung.

(4) Ethanol may have a similar effect.

These mechanisms operate clinically and thus demonstrate the susceptibility of normal defenses to various insults.[12]

Bacteria, once established in the alveoli, can spread to adjacent alveoli via the pores of Kohn. In addition, coughed-up secretions from one area may be transferred to another, thus spreading the pneumonic process.

Organisms reaching the lungs via the bloodstream from distant infected foci cause widespread pulmonary densities.

PATHOLOGY

The pathology of pneumonia can be considered under three general forms:

(1) Lobar pneumonia. All or a large part of a lobe is involved in centrifugally spreading inflammation. It is usually caused by pneumococcus. The four distinct stages include infected edema, exudation, resolution, and organization.

(2) Bronchopneumonia. Here the inflammation is focal, often in a lobular distribution. Independent areas of pneumonic consolidation are present, more common in the lower lobes and posterior lung fields. It can be caused by any organism if it reaches the terminal air passages.

(3) Interstitial pneumonia. Here the inflammatory reaction is more or less confined to the interstitium of the lung (within the alveolar walls) and the peribronchial and interlobular tissues. Polymorphonuclear leukocytes and particularly lymphocytes are present in the alveolar septa to cause thickening of these. Generally, this is seen with viral infections, but also occurs with collagen vascular diseases and drug-induced pulmonary reactions.

CLINICAL FEATURES

The clinical presentation of pneumonia is well known and includes symptoms such as cough and fever and signs such as dullness and rales. The newborn and the compromised host may have pneumonia without any of the classical signs and symptoms. A high index of suspicion is needed and early radiological examination on minimal indication is required.

DIAGNOSIS

At least two questions have to be answered for appropriate management of the patient. Is a pneumonia present? What is the offending organism? The first question is answered relatively easily by a chest x-ray which tells whether a pneumonia is present, its location and character, and the presence or absence of such complicating factors as pleural effusion, pneumatoceles, and pneumothorax. The chest x-ray is of limited usefulness in distinguishing between viral and bacterial etiologies.

In a recent study of the radiological appearance of proved viral lower respiratory tract disease, Osborne showed that the x-ray findings included patchy pulmonary infiltrates, bronchial wall thickening, and perihilar streaking in 72 of 107 cases. In 20 cases the shadows were more homogeneous. (These are usually thought to be exclusively associated with bacterial pneumonias.[20]) There was a striking absence of pleural effusion, pneumothorax, pneumatoceles, and lung abscesses, and it was concluded that presence of these latter findings are inconsistent with viral etiology.

"The chest x-ray is of limited usefulness in distinguishing between viral and bacterial etiologies."

In another recent study, Tew *et al.* attempted to correlate the ability of radiologists to make a diagnosis of bacterial versus viral/mycoplasma pneumonia and concluded that they cannot do so with statistical reliability on initial radiographs and without clinical data.[24] Also in this study chest films did not distinguish one bacterial etiology from another.

Therefore, to make a reliable etiologic diagnosis one needs an adequate culture specimen. Isolation of an organism from blood or pleural fluid is conclusive but these are of limited value since blood cultures are positive in, at most, 25 to 30 percent of cases of pneumococcal pneumonia[2] and less often in others. Pleural effusion, which is present only in a small number of patients, has been documented in mycoplasma[23] and viral pneumonia.[6] A properly obtained tracheobronchial sputum specimen which is rapidly gram-stained and cultured and shows a single predominant organism is suggestive of the disease being caused by the same organism.[14]

One of the problems in the pediatric age group is that even cooperative children cannot be relied upon to bring up tracheobronchial secretions and contamination from the oropharyngeal flora may be unavoidable. Despite these limitations sputum examination is useful. Unfortunately bronchoscopy and culture of the aspirate does not avoid contamination from the normal flora or the upper airways, unless triple lumen bronchoscopy is performed.

Transtracheal aspiration(TTA) attempts to bypass the contaminated oropharyngeal passage. This is a reliable technique and a reliable indicator of the cause of pneumonia. It needs patient cooperation and cannot be applied in most of the pediatric population. A number of studies have documented the usefulness of the technique with few complications.[15,13,8] Reported complications include subcutaneous emphysema, paratracheal abscess, minor hemorrhage, pneumomediastinum, necrosis of cricoid cartilage with tracheal obstruction, and fatal hemorrhage.

Another very useful technique is percutaneous lung puncture. The aim is to obtain some alveolar fluid for gram stain and culture. The procedure is carried out away from the heart and great vessels in an area of consolidation.

TTA and lung puncture are invasive procedures and are not recommended for routine use in the pediatric patient. The following guidelines appear appropriate for such procedures: (1) an acutely ill child in whom appropriate early therapy may be life-saving; (2) absence of clinical response to seemingly appropriate therapy; and (3) a compromised host with a wide spectrum of potential pathogens. Bleeding disorders may be a contraindication.

Another procedure which may need to be considered is open lung biopsy. The indications are similar to those listed above but, since the procedure is operative, the risks must be justified.

A total white blood cell (WBC) count of greater than 15,000 per cu.mm. suggests a bacterial etiology as opposed to

"To commence therapy without obtaining material for proper culture is unacceptable practice."

a viral mycoplasma etiology. Shuttleworth and Charney[22] showed that those children with x-ray evidence of pneumonia and a white cell count greater than 15,000 responded to antibiotics while those with similar x-rays and lower white cell counts did not. The response to antibiotic therapy is indicative of a bacterial etiology.

In some cases the etiologic diagnosis cannot be established despite using all the appropriate techniques. In a study reported by Dorff *et al.* the etiology in 17 percent of cases was unknown.[7] Personal experience suggests that this figure is even higher for the primary care physician where limitations in diagnostic techniques preclude accurate diagnosis in the majority of patients.

PROGNOSIS

The prognosis varies with the responsible organism and the status of the host. Bacteremic pseudomonas pneumonia has a 99 percent mortality.[21] Pneumococcal pneumonia has an average mortality of 2.5 to 3.5 percent; in the pre-antibiotic era it was about 25 to 30 percent.[4] Higher mortality was noted in the presence of bacteremia: 3.5 percent as compared to non-bacteremic disease; it was 13 percent in one study. Despite the low mortality with certain etiological agents, pneumonias are a cause of morbidity and need close observation and inpatient care in many instances. The general prognosis for viral and mycoplasma pneumonia is better, but at the extremes of age complications and death follow.

TREATMENT

Specific therapy depends on the identification of the organism but, at least, it should be related to presumptive etiology. One should have access to tables indicating likely etiologies at various ages under specific circumstances. In most cases therapy is begun before the specific diagnosis is made and then the choice depends on the clinical setting, the condition of the host, the chest film, and a properly performed gram stain of the secretions. To commence therapy without obtaining material for proper culture is unacceptable practice.

Supportive therapy includes close clinical monitoring, laboratory studies when indicated, appropriate fluids, oxygen when the patient is hypoxic, antipyretics for comfort, an adequate caloric intake, and treatment of complications.

PREVENTION

It is not possible to prevent pneumonias because of the varied etiology. Use of antibiotics as prophylactic agents in viral diseases results in bacterial superinfections with resistant organisms.[4] With the commercial availability of a polyvalent pneumococcal vaccine it may be possible to reduce the incidence of pneumococcal disease in selected high-risk population groups like those with sickle cell disease.[19] Prevention of viral diseases with appropriate vaccines may result in a diminution of secondary bacterial infections.

"Use of antibiotics as prophylactic agents in viral diseases results in baterial superinfectious with resistant organisms.[4]"

SELECTED COMMENTS ON SPECIFIC ETIOLOGIES

a. Pneumococcus—This is the single most common causative bacterial pathogen responsible for pneumonia. Antimicrobial susceptibility testing of this organism is indicated especially if there is poor response to penicillin therapy. Reports of penicillin-resistant pneumococci have appeared from S. Africa[17] and also from the U.S.A.[18]

b. Hemophilus Influenza—This agent is responsible for pneumonia in infancy; with increasing age its incidence decreases. One may see lobar or segmental consolidation as well as diffuse, miliary bronchopneumonia. Isolation of the organism from blood or empyema fluid is diagnostic. Antimicrobial susceptibility testing is mandatory because of increasing frequency of ampicillin resistance.[1]

c. Gram-Negative Pneumonias—The organisms responsible are E. coli, Enterobacter-Klebsiella, Proteus Pseudomonas, and Serratia group. E. coli cause disease in the premature infant in a setting of sepsis or meningitis. The other bacteria cause disease with respiratory therapy and contamination of the equipment, following gastrointestinal or genitourinary surgery in patients with chronic lung disease such as cystic fibrosis. Diagnosis is established by isolation of the organism from appropriate culture material. Therapy depends on the antibiotic sensitivity of the isolate. The prognosis generally is guarded.

d. Group A B-Hemolytic Streptococcus—This is a rare cause of pneumonia in the antibiotic era and is now seen mainly after a viral exanthem or influenza. Bacteremia is present in 12 percent of the cases[4] and its presence increases the mortality from 7 to 57 percent. In about a third of the patients, empyema occurs with the presence of a thin serosanguinous fluid; pleural thickening commonly follows. Penicillin remains the drug of choice.

e. Staphylococcus Aureus—For unknown reasons staphylococcus pneumonia has become less frequent. Now it is seen sporadically in the newborn period and infancy. In later years it is seen following influenza infections, in compromised hosts with chronic granulomatous disease, cystic fibrosis, burns, and diabetes. Staphylococcus pneumonia is a serious disease with toxicity, rapid pulmonary deterioration and spread, with pus formation. Bacteremia and distant metastases are frequent. The roentgen findings are characteristic with empyema, pneumatoceles, and pneumothorax. Prolonged antibiotic therapy with a penicillinase-resistant penicillin is necessary and surgical drainage is often required.

f. Adenovirus—Thirty-one different types of adenovirus have been isolated; they cause a variety of clinical syndromes. Types 3, 7, and 21 have been responsible for severe and fatal pneumonia in infants and children. Residual lung damage may follow in survivors. Epidemics have occurred

with adenovirus.[5] Diagnosis is made by virus isolation or a four-fold rise in complement-fixing antibody. Treatment is supportive.

Influenza—These viruses are very successful respiratory pathogens; their ability to change their antigenic character has been partly responsible for their pathogenicity. In normal hosts, pneumonia is uncommon, whereas in the old and the chronically ill viral pneumonia or secondary bacterial pneumonia—especially staphylococcal—causes significant morbidity and mortality. Treatment is supportive. Antibiotic therapy is indicated only in the presence of secondary infection.

Respiratory Syncytial Virus (RSV)—Respiratory syncytial virus has an RNA-containing nuclocapsid; only a single clinically significant antigenic strain exists. It is responsible for the classical clinical presentation of infantile bronchiolitis which is characterized by respiratory distress, expiratory wheezes, and air-trapping. X-rays show scattered pulmonary infiltrates with hyperinflation, hence the inclusion here as a "pneumonia." Therapy is supportive.

Tuberculosis—Improvement in living standards has resulted in a declining incidence of pulmonary tuberculosis. However, this must be considered in any patient with pulmonary symptoms and a pneumonic infiltrate on the chest x-ray. Positive delayed-type skin test and isolation of the organism make the diagnosis.

Pertussis—Pertussis is a clinical syndrome caused by Bordetella species. It predominantly affects young infants and causes paroxysms of coughing followed by inspiratory "whoops." The clinical presentation is often insidious. On the chest radiographs the presence of a "shaggy heart" sign may be indicative of pertussis. This represents an infiltrative process and not a complicating pneumonia.[26] Diagnosis is made by culturing the organism or its demonstration by the fluorescent-antibody technique. Treatment is supportive. Antibiotic therapy with erythromycin does not significantly alter the clinical course but renders the patient non-infectious and is indicated in all cases.

Mycoplasma Pneumoniae—This organism is one of the most frequent causes of pneumonia. Up to half of the cases of pneumonia in the school-age child are caused by this organism.[11] Clinical features are relatively mild with fever, dry "hacking" cough, headache, and malaise. The x-ray changes are more impressive than the clinical features. Diagnosis is suggested by rising cold agglutinin titers and made by complement-fixing antibodies to mycoplasma. The prognosis is good. Therapeutic response to erythromycin or tetracyclines is often slow.

Chlamydia—Beem and Saxon recently have described a distinctive clinical syndrome with stacatto coughing and air-trapping in infants with diffuse chronic lung changes caused by chlamydia trachomatis.[3] The patients are often afebrile and have eosionophilia as well as elevations of IgG and IgM globulins. Diagnosis is made by isolation of the organism from the eyes or nasopharynx or by serological testing.

SUMMARY

Some of the more important factors and etiologies of pneumonia have been discussed. The clinical setting, age of the patient, presence of underlying disease, and the x-ray are helpful in initial assessment. Appropriate cultures are mandatory before beginning specific therapy. The prognosis has improved considerably in the antibiotic era but is still guarded in the compromised host. Development of new and better vaccines should help reduce the mortality and morbidity.

REFERENCES

1. American Academy of Pediatrics, Committee on Infectious Diseases. Current status of ampicillin-resistant H-influenza type b. *Pediatr*57:417, 1976.

2. Austrian R and Gold J: Pneumococcal bacteremia with especial reference to bacteremic pneumococcal pneumonia. *Ann Intern Med* 60:759-776, 1964.

3. Beem MO and Saxon EM: Respiratory tract colonization and a distinctive pneumonia syndrome in infants infected with chlamydia trachomatis. *N Engl J Med* 296:306-310, 1977.

4. Brown JD and Leedom JM: *Pneumonias, Bacterial in Communicable and Infectious Diseases,* Edited by Top FH and Wehrle PF. St. Louis, Mosby, 1976, 508-534.

5. Brown RS, Nogardy MB, Spence L, and Wiglesworth FW: An outbreak of adenoviral type 7 infection in children in Montreal. *Can Med Assoc* 108:434-439, 1973.

6. Cho TC, Hiatt WO, and Behbehani AM: Pneumonia and massive pleural effusion associated with adenovirus type 7. *Am J Dis Child* 126:92-94, 1973.

7. Dorff GJ, Rytel MW, Farmer SG, and Scanlon G: Etiologies and characteristic features of pneumonias in a municipal hospital. *Am J Med Sci* 266:349-358, 1973.

8. Dover AS, Escobar JA, Duenas AL, and Leal EC: Pneumonia associated with measles. *JAMA* 234:612-614, 1975.

9. Duguid JP: The size and duration of air-carriage of respiratory droplets and droplet-nuclei. *J Hyg* 44:471-479, 1946.

10. Gerone PJ, Couch RB, Keefer GU, Douglas G, Derrenbacker EB, and Knight V: Assessment of experimental and natural viral aerosols. *Bact Rev* 30:576-588, 1966.

11. Glezen WP: *Respiratory Viruses and Mycoplasma Pneumonia in Viral Infections: A Clinical Approach,* Edited by Drew, WL. Philadelphia, Davis, 1976.

12. Green GM and Kass EH: Factors influencing the clearance of bacteria by the lung. *J Clin Inv* 43:769-776, 1964.

13. Hahn HH and Beatty HM: Transtracheal aspiration in the evaluation of patients with pneumonia. *Ann Intern Med* 72:183-187, 1970.

14. Heineman HS, Chawla JK, and Lofton WM: Misinformation from sputum cultures without microscopic examination. *J Clin Micro* 6:518-527, 1977.

15. Kalinske RW, Parker RH, Brandt D, and Hoeprick PD: Diagnostic usefulness and safety of transtracheal aspiration. *N. Engl J Med* 276:604-608, 1967.

16. Leedom JM: Pneumococcal infections. In: *Brenneman's Practice of Pediatrics Vol. 11.* Edited by Kelly VC. New York, Harper and Row, 1972, pp 1-32.

17. Applebaum PC, Koornhof HJ, Jacobs M, Robins-Browne R, Isaacson M, Gilliland J, Austrian R: Multiple antibiotic resistance of pneumococci—South Africa. *Morb Mort Wkly Rep* 26:285-286, 1977.

18. Blazevic DJ, Bleeker EZ, Cates KL, Garrad JM, Giebink GS, Lund ME, Quie PG, and Fifer EZ: Resistant streptococcus pneumoniae—Minnesota. *Morb Mort Wkly Rep* 26:345, 1977.

19. Recommendations of the Public Health Service: Pneumococcal polysaccharide vaccine. *Morb Mort Wkly Rep* 27:25-31, 1978.

20. Osborne D: Radiological appearance of viral diseases of the lower respiratory tract in infants and children. *Am J Roentgenol* 130:29-33, 1978.

21. Pennington JE, Reynolds HY and Carbone PP: Pseudomonas pneumonia. *Am J Med* 55:155-160, 1973.

22. Shuttleworth DB and Charney E: Leukocyte count in childhood pneumonia *Am J Dis Child* 122:393-396, 1971.

23. Stevens D, Swift PGF, Johnston PGB, Keaney PJ, Corner BD, and Burman D: Mycoplasma pneumoniae infections in children. *Arch Dis Child* 53:38-42, 1978.

24. Tew J, Calenoff L, and Berlin BS: Bacterial or nonbacterial pneumonia: Accurancy of radiographic diagnosis. *Radiol* 124:607-612, 1977.

25. Vaughn VC III and McKay RJ: Field of Pediatrics. In: *Textbook of Pediatrics,* Edited by Nelson W, Vaughan VC, and McKay RJ. Philadelphia, Saunders, 1975, pp 1-12.

26. Wilkins J and Bass JW: Pertussis in communicable and infectious diseases, Edited by Top FH Sr and Wehrle PF. St Louis, Mosby, 1976, pp 491-501.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

214th Annual Meeting
Medical Society of New Jersey
May 10-13, 1980

HOUSING APPLICATION

THE MEADOWLANDS HILTON

PLEASE RESERVE: ____ SINGLE ____ DOUBLE ____ TWIN ____ SUITE

ARRIVAL: (DATE) _____ AT (TIME) _____

DEPARTURE: (DATE) _____ AT (TIME) _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

IF DOUBLE OR TWIN, NAME OF PERSON JOINING _____

Singles: $50
Doubles: $60

Executive Singles: $75
Executive Doubles: $95
Suites: $150 and up

If range of rates is offered and rate requested is not available, the next available rate will be assigned. Reservations must be received not later than two (2) weeks prior to the opening date of your meeting and will be held until 6 p.m. on day of arrival unless otherwise specified.

(New Jersey Sales Tax—5%)

Complete and mail this application directly to:

Front Office Manager
The Meadowlands Hilton
Two Harmon Plaza
Secaucus, New Jersey 07094

Confirmation will be received directly from the hotel.

A limited number of rooms also will be available at the following hotels.

For information call directly:

Saddle Brook Marriott Hotel	201-843-9500
Holiday Inn, North Bergen	201-348-3600
Holiday Inn, Lyndhurst	201-933-9800

THERAPEUTIC DRUG INFORMATION

This information is compiled by the Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Arnold and Marie Schwartz College of Pharmacy and Health Sciences, Long Island University.*

1. Do large doses of ascorbic acid (Vitamin C) exert a beneficial effect in the treatment of cancer?

Numerous studies have been conducted to determine the effects of large daily doses of Vitamin C on a variety of infectious and other disease processes. Several authors have concentrated their efforts on the efficacy of Vitamin C in the treatment of cancer.[1,2,3]

Cameron *et al.*[4,5,6,7] published a variety of articles dealing with the use of ascorbic acid in the ortho-molecular treatment of cancer. They claimed justification for use of the vitamin because of the following: (a) a protective role in the maintenance of an intracellular matrix and collagen formation, (b) systemic depletion resulting from a high concentration of the vitamin in the neoplasm, (c) prophylactic properties of the vitamin in maintaining immunocompetence and host resistance to neoplasm, (d) inhibition of the conversion of nitrites to nitrosamines, and (e) several other effects on biological function.[7] Their published data also indicated tumor regression in some patients who received ten gms/day of Vitamin C administration either intravenously or orally.[5] However, these findings have been questioned.[8]

Recently Creagan *et al.* conducted a controlled, double-blind, randomized study in 123 patients to evaluate the efficacy of Vitamin C on the symptoms and survival of patients with advanced and preterminal cancer. Parameters that were analyzed included survival rates, symptomatic benefits (appetite, pain, strength), and toxicities (nausea, vomiting and heartburn). This study showed no significant differences between the placebo and the Vitamin C treated groups.

Presently there is a lack of conclusive data to support the concept of a beneficial effect from large doses of Vitamin C in the treatment of cancer patients.

REFERENCES

1. Chinoy NJ: Histochemical studies on ascorbic acid in human cancerous tissue and its significance. *J Amin Morphol Physiol* 19:238-240, 1972.
2. Bates CJ *et al:* The effect of abscorbic acid on the synthesis of collagen precursor secreted by 3T6 mouse fibroblasts in culture. *Biochem Biophys Acta* 278:372-390, 1972.
3. Cameron E *et al:* Ascorbic acid and the glycosaminoglycans: An orthomolecular approach to cancer and other diseases. *Oncol* 27:181-192, 1973.
4. Cameron E and Pauling L: The orthomolecular treatment of cancer. I. The role of ascorbic acid in host resistance. *Chem Biol Interact* 9:273-283, 1974.
5. Cameron E and Campbell A: The orthomolecular treatment of cancer. II. Clinical trial of high-dose ascorbic acid supplements in advanced human cancer. *Chem Biol Interact* 9:285-315 1974.
6. Cameron E *et al:* The orthomolecular treatment of cancer. III. III. Reticulum cell sarcoma: Double complete regression induced by high-dose ascorbic acid therapy. *Chem Biol Interact* 11:387-393, 1975.
7. Cameron E *et al:* Ascorbic acid and cancer: A review. *Cancer Res* 39:663-681, 1979.
8. Creagan ET: Failure of high-dose vitamin C (ascorbic acid) therapy to benefit patients with advanced cancer: A controlled trial. *N Engl J Med* 301:687-690, 1979.

2. Do you have any information concerning tocainide?

Tocainide, under investigation by Astra Pharmaceutical Products, Inc., is a new antiarrhythmic drug chemically similar to lidocaine. It has been found to be effective when administered orally against chronic ventricular arrhythmias associated with a variety of cardiac diseases.[1]

Ryan, *et al.* studied the efficacy of tocainide in 30 patients with ventricular arrhythmias refractory to quinidine, procainamide (sold as Pronestyl®), and propranolol (sold as Inderal®). The dose of tocainide ranged from 400 to 800 mg every eight hours. The investigators found that 18 patients responded to tocainide in that it abolished ventricular tachycardia and/or ventricular premature beats were suppressed by 75 percent or more. The authors concluded that tocainide is an effective oral agent for the therapy of potentially lethal ventricular arrhythmias refractory to other medications.

Winkle and Associates[3] evaluated long-term tocainide therapy in 17 patients with ventricular arrhythmias. Doses ranged from 300 to 700 mg every eight hours. The authors found that tocainide controlled arrhythmias in nine patients with criteria of success being continued reduction of etopic beats and/or control of symptomatic recurrences. Tocainide therapy was unsuccessful in eight patients—three died during therapy and five had no antiarrhythmic response.

*The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists: Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Arnold and Marie Schwartz, College of Pharmacy and Health Sciences, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 5 p.m.—telephone (212) 622-8989 or 330-2735. Responses to these questions were prepared by J.M. Rosenberg, Ph.D., Pharm D., P. Samgkachand, M.S., R.Ph., Hugh Boothe, B.S., Nicholas LaBelle, R.Ph.

fects of tocainide utilizing a cross-over, placebo-controlled design in patients with ventricular premature depolarizations associated with coronary artery disease and previous myocardial infarction, pulmonary disease, or mild essential hypertension. Twelve patients were given an initial loading dose of 400 to 600 mg of the drug and a maintenance dose every 12 hours. Every 48 hours, the dose was increased until either arrhythmic suppression or side effects occurred. Eight patients showed a 76 to 95 per cent reduction in the frequency of ventricular premature depolarizations. The data indicated that the drug can suppress this arrhythmia for 8 to 12 hours in many patients and that continuous suppression could be possible on an 8 to 12 hour dosage regimen.

Side effects, for the most part, are manifested in the central nervous system. These effects are usually mild and usually transient. Tremors, hot and cold sensations, nausea and rash have been the most frequently reported. Less frequently reported have been dizziness, light-headedness, anxiety, incoordination, paresthesia and constipation.[2,3]

In conclusion, tocainide, a lidocaine analogue is orally effective, has a relatively long half-life, and possibly low incidence of serious side effects. It appears to be a useful new antiarrhythmic agent.

REFERENCES

1. Danilo P: Appraisal and reappraisal of cardiac therapy. *Am Heart J* 97:259-262, 1979.
2. Ryan W *et al:* Efficacy of a new oral agent (tocainide) in the acute treatment of refractory ventricular arrhythmias. *Am J Cardiol* 43:285-291, 1979.
3. Winkle RA *et al:* Long-term tocainide therapy for ventricular arrhythmias. *Circulation* 57:1008-1016, 1978.
4. Woosley RL *et al:* Suppression of ventricular ectopic depolarizations by tocainide. *Circulation* 56:980-984, 1978.

3. Provide information about gossypol as an oral contraceptive for men.

Gossypol is a phenolic compound isolated from the seeds, stems, and roots of cotton plants. The chemical has been known for years as the toxic principle left in the cottonseed cake after cottonseed oil extraction. It is also present in the cold pressed cottonseed oil from which it may be removed by reacting with alkali.[1]

Extremely low birth rates in China's Hebeth province were traced to the use of crude cottonseed oil for cooking purposes.[2] After prolonged investigation, it was determined that male infertility was related to the gossypol content of the oil. After a short period of animal studies, the Chinese in 1972 undertook wide-spread clinical trials of gossypol as a contraceptive agent.[2]

Over 4,000 men have undergone treatment with the drug, some for as long as four years. Infertility resulted after two months of a daily dose of 20 mg and then the participants were maintained on 150 to 220 mg per month in divided doses.[3] The drug apparently did not decrease libido in most test subjects and had not been reported to impair potency.[2] Semen analysis at various intervals showed a decrease in motile sperm, malformed spermatozoa and then a decrease in sperm count, leading to azospermia.[2] On discontinuation of the substance, the antifertility effect completely reversed itself within three months.

No obvious toxic effects or pathological changes were observed in human and animal studies. Levels of leutinizing hormone and testosterone were unchanged and apparently indicate that gossypol does not affect hormonal balances.[2]

Adverse reactions reported to date include transient and reversible weakness in ten percent of test subjects on initiation of therapy. In addition, appetite changes, gastric discomfort and nausea have been noted.[3] A few cases of slight EKG changes and disturbances in potassium metabolism have occurred. No chromosomal changes have been observed nor have tests shown any mutagenic effects of the drug.[4]

In conclusion, preliminary data indicated that gossypol may offer an excellent, new approach to contraception. Further testing is required to elucidate the drug's mechanism and to determine its adverse and possible toxic effects.

REFERENCES

1. Claus T and Brady C: *Pharmacognosy,* 6th Ed. Philadelphia, Lea and Febiger, 1970, "Cottonseed Cake", p. 148.
2. Anon.: National coordinating group on male infertility agents, gossypol—A new contraceptive for men. *Chin Med J* (4), New Series 417, 1978.
3. Anon.: The simple cotton plant may be the answer to male contraception, *Inpharma* 196: 2, 1979.
4. DePeyster A and Wang YY: Gossypol—Proposed contraceptive for men passes the Ames test. *N Engl J Med* 275-276, 1979.

PEDIATRIC BRIEFS

Selected Abstracts with Comments *

Sjolin S, et al: A prospective study of individual courses of breast feeding. *Acta Ped Scand* 68:521, 1979.

Seventy-five lactating mothers were longitudinally followed to assess reasons for "lactation crises" or cessation. Another 70 mothers were interviewed retrospectively after ceasing feedings. Mothers in both groups who stopped feeding did so for a wide variety of reasons, very few of them medical. A much larger percentage of prospectively and concurrently interviewed mothers continued to feed at each age group than retrospectively interviewed mothers. The authors believed that the interviews provided support and encouragement thereby accounting for the difference. They concluded that ". . . breast feeding is most likely to succeed and to be continued if the mothers have learned and accepted the concept that breast feeding is superior to artificial feeding during the first months of life and if they are offered immediate and competent practical help in the event of feeding problems or other difficulties."

Comment: As the ombudsman for the child it is up to us to encourage and support breast feeding despite the fact that, because of generations of disuse, there are few cultural props in our society. Nursing will require more pediatrician's time but it is certainly worth the effort.

O'Donovan JC, et al: The failure of conventional drug therapy in the management of infantile colic. *Am J Dis Child* 133:999, 1979.

Ninety-seven young infants with colic were double-blind prospectively treated with homotropine plus phenobarbital plus alcohol, separate components, or a placebo. Seventy percent of all groups improved. No advantages were found for any of the components or its combination.

Comment: No controlled study has shown benefit of medication for colic, a heterogeneous problem. Efforts to assess causation, rarely organic, are usually confined to careful evaluation of growth and general help. The physician then needs to support the family with reassurance about the natural history. The "drug cure," so much a part of our society, need not be established so early. Often, in my own experience, antispasmodics lead to constipation which adds to the problem. These authors suggest that treatment of colic is really "stalling for time and providing support and reassurance that the child is thriving despite his episodic unhappiness."

Yang PJ, et al: Computed tomography and childhood seizure disorders. *Neurol* 29:1084, 1979.

Of 2,400 CT scans on children, 256 were children with seizure disorders. CT was abnormal in only nine of 108 idiopathic generalized seizures (seven of nine showed nonspecific mild bilateral atrophy). In this subgroup, when neurologic examination was normal, only three percent had abnormal CTs. On the other hand, 15/22 neonates with seizures had abnormal scans and chronic seizure disorders beginning in the neonatal period were always abnormal (16/16). Low yield groups include children with normal EEGs, while high yield groups are those with partial seizures and general seizures with known etiology. In children with seizures if the neurological examination and the EEG were normal, the yield of abnormal CTs was only five percent.

Comment: Is that five percent worth it? Some of the abnormalities are amenable to surgical correction. At our current state of knowledge the best recommendation is probably that children with chronic seizures should have CTs if their pattern changes or if their neurologic exam or EEG is abnormal. More data are eagerly awaited.

Kim EE, et al: Sensitivity of radionuclide brain scan and computed tomography in early detection of viral meningoencephalitis. *Radiol* 132:425, 1979.

Twenty-five patients with viral encephalitis (11 herpes simplex) were evaluated. Brain scan (radionuclide) showed abnormalities in 90 percent while CT scan was abnormal in none in the first four days of disease. Brain scan is the procedure of first choice in assessing viral encephalitis.

Comment: The only treatable viral encephalitis is caused by herpes simplex virus (with adenine arabinoside: ARA-A) and an early diagnosis is important since results are better if treatment is begun promptly. Radionuclide scan is more sensitive than CT for viral encephalitis and may be the procedure of first choice in assessing patients with diffuse inflammatory disease of the brain.

Syriopoulou VP, et al: Effect of innoculum size on the susceptibility of H. influenzae b to beta-lactam antibiotics. *Antimicrob Ag Chemother* 16:510, 1979.

The CSF density of organisms in H. influenzae b meningitis often exceeds 10^6 to 10^7 organisms per ml. In assessing sensitivity to antibiotics the innoculum (concentration) of bacteria affects results. This is especially true with

*Abstracted from "Children's Hospital Newsletter," United Hospitals of Newark, Vol. 1, No. 11 (November 1979). Selections are made and original comments prepared by Richard H. Rapkin, M.D., Medical Director, and members of the medical and surgical staff.

carbenicillin and cefamandole which certainly should not be used in H. influenzae b meningitis.

Comment: The drugs of choice for H. influenzae b meningitis are ampicillin (B lactamase negative) or chloramphenicol (B lactamase producing). Cephalosporins despite possible effectiveness *in vitro* do not penetrate the CSF well, and even if they do, the innoculum effect would render them useless. The newer cephalosporins (e.g., cephamandole) are attractive drugs but cannot be used unless meningitis is ruled out.

Roberts, KB: Blood cultures in pediatric practice. Editorial. *Am J Dis Child* 133:996, 1979.

Which children with fever are at risk for occult bacteremia and its sequelae (meningitis, etc.)? Much data are reviewed in this editorial which concludes that a careful history, physical examination and frequent followup are essential. Hospitalization should be considered when doubt exists in any of these parameters, especially when careful followup cannot be assured. A blood culture will not solve the problem of which child is at risk except by "bringing to attention those infants in need of prompt recall and reevaluation."

Comment: This is a careful statement of our dilemma in assessing the small child with fever. Please read it. My own feeling is that in inner city emergency rooms there is a selection of sicker patients who are notoriously difficult to follow up. We admit, culture, tap and observe any questionable infant. In practice, where patients come sooner, the percentage of patients with benign self-limited disease will presumably be greater, and followup more reliable. Blood cultures in some of these patients may be helpful.

The temptation to give antibiotics to such children, without doing a blood culture and spinal tap, must be resisted. The danger of partially treating (and hiding) serious disease cannot be overemphasized.

Talal, N: Systemic lupus erythematosus, autoimmunity, sex and inheritance. Editorial. *N Engl J Med* 301:838, 1979.

Lymphocytes with receptors for autoantigens exist in normal humans (why?). Some common substances (e.g., lipopolysaccharides from bacteria) activate B lymphocytes indiscriminately and often lead to production of autoantibodies. Most of us must suppress this in some way because we do not have autoimmunity problems. A failure of suppression may contribute to the development of autoimmunity (e.g., SLE). Evidence now exists for suppressor defects in SLE. Recent data suggest that genetic and hormonal factors predispose. "It is likely that in normal persons actions on immunoregulatory circuits operate to the host's advantage to eliminate foreign organisms and prevent aberrant immune responses. In the predisposed person, however, the regulatory equilibrium is disturbed so that various triggering events . . . can initiate autoimmune reactions."

Loering-Baucke VA, et al: A placebo-controlled trial of cephalexin therapy in the ambulatory management of cystic fibrosis. *J Pediatr* 95:630, 1979.

Antibiotics are important in controlling acute infection in Cystic Fibrosis (CF) but oral antibiotics in ambulatory management of such patients is controversial. A double-blind crossover trial of cephalexin use revealed that sputum colonization with Staph. was reduced, and a significant decrease in frequency of respiration illness was noted. Additional antibiotics were needed less often and hospitalization frequency was reduced during treatment with cephalexin. Benefits were found only in patients with sputum organisms sensitive to cephalexin. Adverse effects included an increase in colonization with pseudomonas. Such patients were not improved with cephalexin.

Comment: The value of continuous "prophylaxis" remains undefined. Whether one treats acute exacerbations or chronic problems, sputum culture specific therapy should be used.

Schwachman H., et al: Quality of sweat-test performance in the diagnosis of cystic fibrosis. *Clin Chem* 25:158, 1979.

Results are unreliable about 50 percent of the time when sweat tests are done in small community hospitals. Infrequency of test performance, inexperienced technicians and lack of appropriate standards contribute. A careful pilocarpine iontophoresis test done on two separate occasions is very reliable in diagnosis. Screening procedures are not reliable although the chloride plate test is a reasonable rapid screening tool (not a definitive diagnostic test.)

Comment: All patients with possible CF must have a reliable sweat test. If not available locally, it is preferable to send the patient to an experienced laboratory or clinic.

Tager IB: Effect of parental cigarette smoking on the pulmonary function of children. *Am J Epidemiol* 110:15, 1979.

Children in East Boston were selected randomly and studied. Results demonstrated that cigarette smoking by parents has a measurable effect on the respiratory function of their children, whether or not the children smoked themselves. Variables such as differences in socioeconomic status appeared to have no role, nor did crowding. The possibility that contamination of indoor air with cigarette smoke was causally related could not be excluded.

Comment: Smokers have reduced respiratory functions compared to controls. Children of smokers are more likely to smoke than children of non-smokers. Children who smoke have reduced respiratory function. Children of smokers do also. None of this is surprising. What is surprising is the continuation of smoking by parents, teachers, nurses, doctors, etc. In this international year of the child maybe we could stop for them, if not for ourselves. (Pipes and cigars too?!)

Jones R., et al: Bacterial tracheitis. *JAMA* 242:721, 1979.

Eight cases of acute infectious upper airway disease are described. The patients appeared to have severe viral croup requiring an artificial airway in all. Lateral neck films were consistent with viral croup. Purulent secretions from the trachea (growth of S. aureus in 6/8) were seen in all. Response to antibiotics was gratifying. Viral studies were not done. The authors suggest that this is a distinct entity although they note that an alternate hypothesis is bacterial superinfection upon viral croup.

Comment: Most viral croup is benign. Some patients do progress to respiratory insufficiency and obviously some patients develop evidence of bacterial superinfection. I believe these cases are examples of same. Influenza and parainfluenzae viruses cause a severe tracheitis and secondary infection, though uncommon, cannot be ignored. Just as in viral influenza, careful assessment is necessary to decide when a viral illness is superinfected. Misuse of antibiotics in such patients will just select resistant organisms to be the superinfection culprits.

Amendments on Requirements for Issuing a Prescription

Board of Medical Examiners' Rule 13:35-6.6

Edwin H. Albano, President of the Board of Medical Examiners in the Division of Consumer Affairs in the Department of Law and Public Safety, pursuant to authority of N.J.S.A. 45:9-1 et seq., proposes to amend the rule setting forth requirements for prescriptions to include notice of generic drug availability to patients by a person possessing a plenary license to practice medicine and surgery or a podiatrist.

Full text of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

13:35-6.6 Requirements for issuing a prescription

(a) Physcians who possess a plenary license to practice medicine and surgery and podiatrists who issue prescriptions for medication shall advise all patients by adequate notice, such as but not limited to a sign or pamphlet in the waiting room of the practitioner's office, that a request of the practitioner may be made by the patient to substitute a generic drug for any prescribed medication.

(b) [(a)] Physicians and podiatrists shall provide the following on all prescriptions.

1. Full name, age and address of patient;

2. Prescriber's full name, address, telephone number and proper degree designation as appears on prescriber's license;

3. Prescriber's [BNDD] DEA number when required for the dispensing of controlled dangerous substances. (Controlled Dangerous Stubstances Act of 1970);

4. Date of prescription;

5. Name, strength and quantities of drug or drugs to be dispensed;

6. Adequate instruction for the patient (P.R.N. or "as directed" alone is not sufficient);

7. Number of refills permitted or time limit for refills or both;

8. Signature of prescriber;

9. When preprinted prescription blanks are not available full name of the prescriber must be printed or stamped in block letters under the signature of prescriber;

10. Every prescription blank shall be imprinted with the words "substitution permissible" and "do not substitute" and shall contain space for the physician's or podiatrist's initials next to the chosen option, in addition to the space required for the signature by paragraph 8 above.

11. In no instance shall a physician or podiatrist utilize a prescription form which includes preprinted information such as, but not limited to, language, initials or other indications to discourage or prohibit substition, which a prescriber may prohibit only by initialing or writing "do not substitute" on the individual prescription.

[10.] **12. In no instance shall a physician or podiatrist sign a blank prescription form which does not conform with the above standards.**

(c) [(b)] Failure to comply with this ruling will subject the physician to disciplinary sanction in accordance with the Medical Practice Act.

(Filing date—September 12, 1979)

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

DOCTORS' NOTEBOOK

Trustees' Minutes November 11, 1979

A regular meeting of the Board of Trustees was held on Sunday, November 11, 1979, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Pennsylvania Medical Society . . . Noted the following observations, among others, of President Alessi upon his attendance at the November 1-3 meeting of the House of Delegates of the Pennsylvania Medical Society:

• The Pennsylvania Medical Society has a membership of 14,000 which is represented by 260 delegates to their House, including representatives from the medical schools, residents' group, and medical students. Many smaller counties are grouped into districts for representation. This information will be forwarded to the Special Committee on Long Range Planning and Development which is studying reapportionment of MSNJ's House of Delegates.

• The report of the AMA Ad Hoc Committee on the Principles of Medical Ethics, chaired by Dr. James S. Todd, was unanimously approved.

• Mandatory membership in the AMA was approved.

National Health Insurance . . . Noted that Dr. Alessi will make a five-minute presentation of MSNJ's views on National Health Insurance at a hearing of the Subcommittee on Health and Scientific Research of the Senate Committee on Labor and Human Resources in Newark on November 19.

Mid-Atlantic States Medical Leadership Conference . . . Noted that the following items had been discussed at the Mid-Atlantic States Medical Leadership Conference on November 9 in Richmond, Virginia, which was attended by President Alessi and Mr. Joseph Lucci of MSNJ staff:

• Nursing Training—It was felt that multiple types of training should be encouraged; however, it appeared that hospital-based programs are being downgraded.

• Professional Liability—Nationwide statistics indicate an increase in the number of malpractice cases and the size of the awards. It is not necessarily due to more negligence but appears to be the result of more adept case presentation.

• Continuing Medical Education—Unanimous support was given to the AMA's position of withdrawal from the Liaison Committee on Continuing Medical Education (LCCME).

• Diagnostic Related Groups (DRGs)—Much interest was shown in the DRG concept being initiated in New Jersey and it was believed that other states should be informed on the progress of the program. To this end the following resolution, directed to the AMA, was drafted and offered for consideration. It was approved by our Board of Trustees and will be submitted to the AMA delegation for consideration at the Interim Meeting in Hawaii, December 2-5:

> RESOLVED, that the AMA monitor the Diagnostically Related Group hospital reimbursement program being implemented in New Jersey; and be it further
>
> RESOLVED, that when the data on this program are sufficiently mature a report on its impact on the practice of medicine, the costs of health care, and the quality of care be submitted to the AMA House of Delegates.

Subordinated Loan Payments . . . Received a report from Mr. Maressa that the Internal Revenue Service has issued a technical advice declaring that subordinated loan payments (surplus or up-front monies that went into the Medical Inter-Insurance Exchange of New Jersey) are not deductible under Section 172 of the Internal Revenue Code and must be treated as a capital asset. The matter has been referred to a special tax counsel and a report will be made to the Board.

Membership and Dues Collection . . . Noted that total, dues-paid membership as of October 31 was 7,751. At the same time in 1978 this figure was 7,939.

. . . Noted that Essex County was the only county to have reported dues collection for 1980—136.

Medical Society of New Jersey Student Association . . . Noted that current membership in the Medical Society of New Jersey Student Association is 294, only eight of whom are from Rutgers Medical School.

. . . Noted that physicians and members of the allied health professions are being recruited to speak at the January and February sessions of MSNJSA.

Legislation:

1. **S-3211 and A-3246 . . .** Approved the position of the Council of Legislation in reaffirming the July 12 position of **APPROVED** on S-3211 and A-3246 (Licensing of Midwives).

2. **Resolution #27—Better Nutrition in the Schools . . .** Approved the position of the Council on Legislation of **APPROVED** on S-715 (which covers the intent of Resolution #27—1979 House of Delegates—that fruits, fruit juices, and other healthful foods be substituted for junk foods in school vending machines) and directed that the New Jersey Legislature be notified of MSNJ's position on this legislation.

3. **Prescription Blank Requirements . . .** Approved a recommendation from the Council on Legislation that no action be taken concerning the amendment to Regulation #10 of 13.35-6.6*—"Requirements for issuing a prescription" which states:

> 10. Every prescription blank shall be imprinted with the words "substitution permissible" and "do not substitute" and shall contain space for the physician's or podiatrist's initials next to the chosen option, in addition to the space required for the signature by paragraph 8.

*For complete text of revisions see page 53 of this issue.

. . . Directed that to comply with new section (a) of the rule, quoted below, *The Journal* carry a one-page copy of the regulation which can be used as a tearsheet for posting in the physician's office (see p. 53, this issue):

(a) Physicians who possess a plenary license to practice medicine and surgery and podiatrists who issue prescriptions for medication shall advise all patients by adequate notice, such as but not limited to a sign or pamphlet in the waiting room of the practitioner's office, that a request of the practitoner may be made by the patient to substitute a generic drug for any prescribed medication.

Note: There was concern that by not having a sign in his waiting room a physican would be subject to action by the State Board.

4. **Prescription Drug Price and Quality Stabilization Act** . . . Approved a recommendation from the Council on Legislation that the Council be authorized to seek changes in the Prescription Drug Program through the regulatory process and to apprise the Ocean County Medical Society, sponsor of Resolution #29—1979 House of Delegates—(see below) which called for change through legislative channels, of the developments. The sponsor has agreed to the procedure recommended by the Council.

RESOLVED, that . . . the Medical Society of New Jersey, through its legislative channels, amend the Prescription Drug Program Act so that every prescription dispensed under this Act includes the following:

(a) Labeling of the prescription as to its generic name or brand name, unit dosage, amount dispensed, and expiration date, unless the physician specifies "do not label."

(b) The pharmacist must record on the patient's drug file the name and source, drug manufacturer's lot and batch number of the drug prescribed.

(c) The drug manufacturer must identify to the pharmacist the drug as to its source, lot and batch number.

(d) In the event of a drug recall, the State Drug Utility Review Council shall be notified by the drug manufacturer as to the drug lot and batch number.

5. **Current State Legislation** . . . Approved the recommended positions of the Council on Legislation on the following bills of interest, except as indicated (see A-3489):

S-337—Errichetti—Medical Education
Appropriates $9,000,000 for land acquisition and construction of "clinical teaching and research" of the College of Medicine and Dentistry of New Jersey osteopathic branch and the allopathic clinical program in Camden. **DISAPPROVED,** because the expenditure of 9 million dollars is not necessary since existing facilities are adequate.

S-3357—Hamilton—Pilot Program to Provide Case Management Services to the Mentally Ill and Developmentally Disabled
Program emphasis would be directed to residents of nursing homes, rooming houses, and residential health care facilities, but does not rule out services to those in other types of community placements. **NO ACTION.**

S-3359—Friedland—Public General Hospital Assistance
This bill would amend existing law to authorize county and municipal hospitals to offset outpatient expenses with monies currently available, but restricted to inpatient services.—**NO ACTION**

S-3390—Foran—Vital Statistics
Authorizes the correction of birth records based upon sworn testimony of two witnesses. It eliminates the provision calling for documentary evidence when the correction is made prior to the individual attaining the age of majority. **NO ACTION**

A-3463—Visotcky—Podiatry
Permits the Department of Higher Education to make capitation payments to out-of-state podiatry schools for New Jersey residents to assure New Jersey of a future supply of podiatrists. **DISAPPROVED,** because the need for this legislation has not been demonstrated and its cost would be an unnecessary burden on the taxpayers of New Jersey.

A-3489—Herman—No Fault Auto Insurance
This bill places a $100,000 limit on medical expense benefits. Establishes an Advisory Committee to assist the Commissioner of Insurance in establishing reimbursement schedules for medical and hospital services, (the rates of the Hospital Rate Setting Commission would be used). Those convicted of driving under the influence would not be able to assert claims. The current $200 medical expense threshold would be retained for claims under $10,000. A verbal threshold would be used for claims exceeding $10,000. (Note: this could present a difficulty, since current Rules of Court do not allow specification of damages in pleadings. Apparently, the technique used in Federal causes of alleging simply that "damages exceed $10,000" would be used. **NO ACTION** . . . in view of the Council's July 12, 1979 opinion on **S-3282—"New Jersey Automobile Reparation Act—CONDITIONAL APPROVAL,** pending deletion of Advisory Board established by the Commissioner which will deal with quality assurance measures and which has only two physicians out of five members, plus the deletion with reference to medical care and medical fees." (See page 771, October 1979, JMSNJ).

Note: The Council's recommended position of no action was changed upon motion by the Board to **CONDITIONAL APPROVAL,** pending deletion of Advisory Board established by the Commissioner which will deal with quality assurance measures and which has only two physicians out of five members; plus the deletion with reference to medical care and medical fees.

A-307—Stewart—Radiologic Technicians
Transfers the x-ray technician licensing board from the operative effects of Title 45 into Title 26. **NO ACTION**

A-3355—Hurley—Blood Collection and Replacement
All blood banks would be required to engage in reciprocal exchange programs without regard to geographical location or organizational affiliation. The assessment of non-replacement fees is prohibited. The New Jersey Public Health Council shall regulate the system. **ACTION DEFERRED,** pending further investigation of the Medical Society of New Jersey's Council on Public Health.

AJR-3015—Schwartz—Computerized Medical Records
Directs the Department of Health to prepare plans to assist health professionals and institutions in the establishment of CMR systems for health emergencies. The Department of Health is to file its report within one year. **NO ACTION**

Council on Public Relations . . . Approved the following as the continuing projects for 1979-1980 for the Council on Public Relations:

1. Publication and distribution of the *Membership Newsletter;*
2. Preparation of special news releases and publicity in furtherance of the Society's business, including:
a. Eye Health Screening Program
b. Annual Meeting
c. Child Safety Week
d. Selected official programs and activities
3. Responsibility for bestowal of Golden Merit Award.
4. Responsibility for information center and issuance of press releases at the Annual Meeting.
5. Encouragement of continuance and/or establishment of orientation programs of new members under the sponsorship of component societies.
6. Encouragement of statewide emergency medical care coverage.
7. Encouragement of increased voluntary blood donations.
8. Encouragement of radio broadcasts under the auspices of component medical societies
9. Encouragement of medical TV programs.
10. Diabetes Detection Week
11. Placement Service

Committee on Medicaid . . . Approved the following recommendation from the Committee on Medicaid concerning provider fees:

That the Board of Trustees make a statement [in support of the Division of Medical Assistance and Health Services' request for an increase of $10 million to apply to individual provider fees] on behalf of the Medical Society of New Jersey, requesting the Governor to reinforce the Division's recommendation.

Conflict of Interest . . . Approved part #2 of the Conflict of Interest statement prepared by the Council on Medical Services as reworded by Mr. Maressa, in accordance with the direction of the October 21 meeting of the Board of Trustees. Part #1 of the policy statement was approved by the Board at the October 21 meeting. (See page 930 December 1979 issue JMSNJ.) The entire Conflict of Interest Policy Statement follows:

1. In cases where a majority of the Board of Trustees of the Medical Society of New Jersey or the House of Delegates feel there is a disabling conflict of interest in a physician's status, he/she:
a. Should be asked to resign voluntarily from one or the other.
b. Failing to do so voluntarily, he/she should be removed from a position of authority in the Medical Society of New Jersey.
c. This shall not pertain to the House of Delegates, but is applicable to officers, members of the Board, and chairmen of major councils and committees.

2. At the beginning of all meetings of the Board of Trustees, councils, or committees of the Medical Society of New Jersey, the chairman of the group shall announce that members are encouraged to record themselves as abstaining from voting on any issue where they may have a conflict of interest.

If a challenge is raised prior to taking a vote, the challenge shall be resolved by a majority of those present voting to disqualify the individual challenged. If less than a majority vote to disqualify, then the challenge is lost and the individual may vote.

If a challenge is raised subsequent to a vote at the same meeting the challenge shall be resolved by a majority of those having voted. If they sustain the challenge, the action shall be rescinded, the individual disqualified, and a new vote taken.

For the purposes of this statement, a "conflict of interest" arises when the impartiality of the member might reasonably be questioned, including but not limited to instances where he knows that he, individually or as a fiduciary, or his spouse, or relatives within the second degree of relationship has a financial interest in the subject matter under discussion or any other interest that could be affected by the outcome of the decision.

(Note: If all members of the given entity have the same or similar interest or position, then there is no "reasonable question" as to impartiality.)

MSNJ Auxiliary . . . Received a statement from Mrs. J. James Pegues, President of the MSNJ Auxiliary, asking for support in the Auxiliary's problem of decreasing membership and for recognition of the Auxiliary's potential service on behalf of MSNJ. The Board assured Mrs. Pegues of support of the Auxiliary efforts and will communicate with the county medical society presidents appealing for support.

Medicare Reimbursement . . . Approved the following recommendation from the Mercer County Medical Society concerning Medicare reimbursement and directed that it be forwarded in proper form to the AMA Board of Trustees for action:

> The Mercer County Medical Society unanimously urges the Board of Trustees of the Medical Society of New Jersey to request the American Medical Association to introduce legislation to change the physician reimbursement formula under Medicare to reflect current cost-of-living data.

Recognition of Humanitarian Service . . . Approved a contribution of $500 each to two physician-members of MSNJ who are going to Cambodia at their own expense to offer their services in the present crisis.

Vacancy in AMA Delegation . . . Reaffirmed the action taken by the Board in executive session on October 21 declaring a vacancy in the AMA Delegation and referring the matter to the Nominating Committee for action at the 1980 Annual Meeting.

Note: It had been suggested that filling a vacancy is the right of the House of Delegates or the Board of Trustees, and since the Board did not act, the House would have the right to do so at the Special Session. While the Bylaws give the Board of Trustees the right to fill vacancies between annual meetings of the Society, the Board decided not to take this discretionary action and referred the matter to the Nominating Committee, in accordance with the procedure set forth in Chapter VIII, Section 3 of the Bylaws which provides that the House of Delegates is to conduct elections at the Annual Meeting of the Society. The House may fill vacancies only by election, and could not legally act at the Special Session. The action was taken by the Board to allow the House to conduct a fair election. An Alternate Delegate will serve at the Interim Meeting of the AMA in December.

House of Delegates Special Session—November 18, 1979*

Two hundred and ninety-five delegates from twenty-one county societies and seventeen fellows and officers of the Medical Society of New Jersey participated in the Special Session of the House of Delegates on Sunday, November 18, 1979, at the Executive Offices, Lawrenceville to consider:

- Report of Committee on Finance and Budget
- Report of Committee on Membership and Dues Collection
- Report on Discussions with the State Board of Medical Examiners
- Report on Statewide IPA Study
- Report of Council on Medical Services
- AMA Ad Hoc Committee on the Principles of Medical Ethics
- 1980 Professional Liability Rates

The delegates had been supplied with relative materials in advance of the meeting.

The Session was called to order at 10 a.m. by Alfred A. Alessi, M.D., President. Watson E. Neiman, M.D., Associate Rector of Trinity Church, Moorestown, and Past President and a member of the Burlington County Medical Society, was introduced to deliver the invocation. Doctor Neiman welcomed the House of Delegates to the new facility and offered his acclamation to Mr. Maressa and the staff for their efforts.

The Chairman of the Committee on Credentials, Charles I. Nadel, M.D., reported the number of delegates present, and Arthur Bernstein, M.D., Secretary, reported that a quorum of the delegations was present. Following the announcements of the Sergeants-at-Arms and the Speaker and Vice-Speaker of the House, the meeting was turned over to the Speaker, Henry J. Mineur, M.D.

Frank Y. Watson, M.D., Chairman of the New Jersey Medical Political Action Committee was given the floor to make a presentation on the political activities of the Committee, the proposed goals for 1980, and the membership status. The importance of JEMPAC was stressed and all members of the House were urged to join.

Following Doctor Watson's presentation, tellers were appointed in the event they would be needed during the course of House deliberations.

*Actions of the House are recorded in boldface type at the end of each item.

The House, by voice vote, favored a recommendation that no one be permitted to speak more than once (except in rebuttal) on any given subject, except by permission of the House, and limited each speaker's time to four minutes.

The speaker opened the floor for presentation of the reports at 10:15 a.m.

COMMITTEE ON FINANCE AND BUDGET

Richard E. Lang, M.D., Chairman

I. *Bylaw Changes*

1. *The Treasurer*

Current Bylaws detail the function of the Treasurer and impose an accounting system which is technically antiquated, and impossible to maintain. Bylaws should simply require procedures and policies in accordance with generally accepted accounting standards. Further, the current language requires the Chairman of Finance and Budget to function as a point of internal accounting control. Internal accounting control is clearly the responsibility of staff and the external auditors, under the supervision of the Board of Trustees. The system is not a matter to be detailed in the Bylaws.

Recommendation

That the following duties of the Treasurer be prepared in the form of Bylaws by the Committee on Revision of Constitution and Bylaws, for the action of the House of Delegates in May 1980:

The Treasurer shall have general supervision of the financial affairs of the Society.

He shall cause to be collected all dues and assessments and shall supervise established accounting and investment procedures for the handling of the Society's funds.

He shall report on the financial condition of the Society to the House of Delegates at each Annual Meeting.

At the end of each fiscal year, he shall cause to be prepared an annual audit conducted by an external certified public accountant.

The recommendation was adopted by the House.

2. *Budget Adoption*

The current procedure as detailed does not reflect sound financial management. A major portion of this problem has been dealt with by the Ad Hoc Committee on Membership and Dues Collection. Areas that they have not dealt with, but which must be addressed are as follows:

Recommendation

That the Committee on Revision of Constitution and Bylaws prepare amendments to be considered by the House of Delegates in May 1980 to effect these concepts:

a. The House of Delegates, with recommendations developed by the Committee on Finance and Budget, and reviewed by the Board of Trustees, shall adopt an annual operating budget in advance of the next fiscal year.

b. The House of Delegates shall determine the annual dues.

The recommendation was adopted by the House.

II. *Special Funds*

1. *Medical Student Loan Fund*

Over the years the Society has managed this money as a segregated fund although it does not have recognition by the Internal Revenue Service. It would be more sound to collapse the invested assets of this fund ($211,000) into the Society's General Fund, and to budget each year a specific amount of money to be available for student loans.

Recommendation

That the Medical Society Student Loan Fund be collapsed into the Society General Fund and that a specific amount of financing be budgeted each year for Medical Student Loans.

Action postponed until Annual Meeting, May 1980.

2. *Professional Liability Fund*

The Department of Liability Control is well established and has long-range projects underway. Current expenditures are averaging $230,000 annually. There is a fund balance of $870,000. Therefore, in less than four years the fund will be exhausted and the membership faced with a sizeable dues' increase. This can be avoided by collapsing the fund into the General Fund, and providing for a drawing on reserve and budgetary income to underwrite the cost of the program.

Recommendation

That the Professional Liability Fund be merged into the General Fund and the costs of the Department of Liability Control become part of the annual operating budget.

Action postponed until Annual Meeting, May 1980.

The report of the Committee on Finance and Budget was filed.

COMMITTEE ON MEMBERSHIP AND DUES COLLECTION

Augustus L. Baker, Jr., M.D.

I. *Membership*

This Committee met several times since its creation by the 1979 House of Delegates in Atlantic City. Working with the Board of Trustees, we have developed several projects which have already been completed. These are:

a. Urging the chiefs of staff of New Jersey hospitals to act as recruiting sources for the Medical Society of New Jersey.

b. Requesting hospital medical staffs to consider a bylaw requirement that members of attending staffs be members of a statewide professional society, which is representative of practicing physicians.

c. Requesting the Medical Inter-Insurance Exchange to consider the underwriting benefits of Society membership, i.e., mandatory CME, willingness to be subject to peer review, willingness to serve in peer review systems, willingness to serve on Supreme Court Subpanels, willingness to provide expert assistance to the State Board of Medical Examiners, and cooperation in risk management programs.

In addition to the above, the House should be aware that the County Executives and the Medical Society of New Jersey are soliciting membership from newly licensed physicians. Also, at this time, the Medical Society of New Jersey Staff is instituting a visitation program to reach the medical leadership in New Jersey.

The foregoing items were received by the House as informational and were filed.

II. *Dues Collection*

The Committee studied membership records, statistical patterns, and cash flow data. The Medical Society of New Jersey staff originally thought that having the dues year and the fiscal year coincide might enable the House to have a better understanding of financial statements. (The external auditors concurred with this.) It appears, however, that incorporating this concept would cause difficulties for component society staffs. We are not, therefore, recommending that any action be taken in that regard.

The subsequent motions, however, are recommended to this House not only to improve dues collection, but to establish real correlation between the dues paying member and representation in the House of Delegates.

Recommendations

1. That the House approve in principle a Bylaw change that makes dues clearly payable on March 1 with termination occurring on that date if dues have not been paid; that the House refer

this matter to the Committee on Revision of Constitution and Bylaws for development of the appropriate Bylaw language for adoption at the 1980 Annual Meeting.

2. That the House refer to the Committee on Finance and Budget, for report to the 1980 Annual Meeting, the question of the determination of a grace period for reinstatement and the imposition of administrative and processing fees for reinstatement after a certain date.

3. That component society representation to the House be calculated on the number of members that have paid dues to the Medical Society of New Jersey by March 1 of the year that the House is meeting; that the House refer this matter to the Committee on Revision of Constitution and Bylaws for development of the appropriate Bylaw language for adoption at the 1980 Annual Meeting.

Recommendations 1, 2, and 3 were adopted by the House.

The report of the Ad Hoc Committee on Membership and Dues Collection was filed.

REPORT ON DISCUSSIONS WITH THE STATE BOARD OF MEDICAL EXAMINERS

Alfred A. Alessi, M.D., President

The following **recommendations** of the Executive Committee were presented:

1. That the House of Delegates reconsider Resolution #31 (1979 House of Delegates):

"RESOLVED, that the House of Delegates request the Medical Society of New Jersey actively to support repeal of Rule 13:35-6.16—Uses of Amphetamines and Sympathomimetic Amine Drugs, recently promulgated by the State Board of Medical Examiners."

The House voted to reconsider Resolution #31.

Resolution #31 was not adopted.

2. Support continued negotiations with the State Board of Medical Examiners.

The recommendation was adopted.

3. Approval of the suggested recommendations of the Board of Trustees:

a. Board of Trustee members attending monthly meetings of the State Board of Medical Examiners on a rotation basis.

b. The President-Elect attend all meetings of the State Board of Medical Examiners during his tenure.

c. A member of the executive staff of MSNJ attend all meetings of the State Board of Medical Examiners.

The recommendations were adopted.

The following recommendations were presented from the floor.

RESOLUTION FROM R. H. SHARRETT, M.D., DELEGATE FROM UNION COUNTY

That the President of the Medical Society of New Jersey and the Board of Trustees (or their representatives) meet with the Governor of the State of New Jersey with regard to replacement of the current leadership of the State Board of Medical Examiners at the nearest propitious opportunity, and review with the Governor and such other appointed officials their performance as may seem appropriate to the Board of Trustees at the nearest propitious opportunity.

The resolution was not adopted by the House.

RESOLUTION FROM JOHN WINSLOW, M.D., DELEGATE FROM ESSEX COUNTY

That at the interim meeting on November 18, 1979, the House expressly direct that the President of the Medical Society of New Jersey establish a special ad hoc committee whose sole intent and purpose would be to carry out the "thorough investigation" of the Board of Medical Examiners previously requested, and that said committee be directed to give a report of its investigations and conclusions at the Annual Meeting of the House in 1980. The members of the special committee should be from the Board of Trustees, plus at least four other volunteer members of MSNJ who have shown a particular interest in the activities and practices of the Board of Medical Examiners.

The resolution was not adopted by the House.

RESOLUTION FROM C. BABIGIAN, M.D., DELEGATE FROM BERGEN COUNTY

That the President and the Board of Trustees of the Medical Society of New Jersey be commended on the fine work done regarding the State Board of Medical Examiners and that the Medical Society of New Jersey and the State Board of Medical Examiners be encouraged to continue in the spirit of cooperation between both bodies for the betterment of medical services for the people of New Jersey.

The resolution was adopted by the House.

RESOLUTION FROM J. F. DONATO, M.D., DELEGATE FROM ESSEX COUNTY

That the dates of the hearings and the minutes of the meetings of the State Board of Medical Examiners be published in *The Journal* and *Membership Newsletter.*

Amended by Richard H. Sharrett, M.D., delegate from Essex County: That in publishing the minutes of the State Board, the identification of the defendant physician involved in the proceedings be deleted from the minutes.

The amended resolution was not adopted by the House.

TASK FORCE ON IPA PROJECT

Howard D. Slobodien, M.D., Chairman.

As charged by the 1979 House of Delegates, this Committee considered a large number of concepts, suggestions, and data including highly sensitive legal issues. Our conclusions are:

1. That a statewide multi-service area HMO/IPA sponsored by the Medical Society of New Jersey is not feasible at this time.

Accepted as informational by the House.

2. That the Medical Society of New Jersey assist *in the providing of informational material in the development of physician-sponsored IPAs where local physician interest is demonstrated, and where need exists. (Italics indicate amendment)*

Adopted as amended by the House

3. That the Medical Society of New Jersey provide educational services to physicians on the status and future of prepaid health care programs.

4. That the Medical Society of New Jersey assist in the formation of a voluntary organization of IPAs.

5. That the Medical Society of New Jersey continue to study the progress of existing HMOs, consult with experts on prepaid health care, and be aware of the efforts of government, industry and labor in this regard.

6. That the performance and effectiveness of operating HMOs in New Jersey be the subject of continuing study and scrutiny.

7. That the quality of care of HMOs should be examined in order to protect the HMO subscriber and the professional integrity of IPA member/physicians.

8. That the need for legal and/or administrative assistance to IPA member physicians should be discussed and evaluated, to determine if this service could be provided through an association of IPAs or some other source.

Items 3 through 8 were adopted by the House.

COUNCIL ON MEDICAL SERVICES

Charles O. Tyler, M.D., Delegate from Camden County.

Resolution #14—Severing Relations with Blue Shield of New Jersey (1979 House of Delegates)

RESOLVED, that the Medical Society of New Jersey encourage its members to sever any former relationships with Blue Shield of New Jersey in the interest of dealing equally and fairly with each individual patient.

A recommendation from the Council not to adopt Resolution #14 was adopted, as amended, by the Board of Trustees at the August 8, 1979 meeting.

Recommendation

Since participating in Blue Shield of New Jersey is a voluntary process, the Board recommends that Resolution #14 not be adopted.

The recommendation was adopted by the House.

AMA AD HOC COMMITTEE ON THE PRINCIPLES OF MEDICAL ETHICS

The report of the Ad Hoc Committee was received by the House as informative. Consideration and action on the report will be taken at the Annual Meeting in May, 1980.

1980 PROFESSIONAL LIABILITY RATES

James S. Todd, M.D.

Dr. James S. Todd, Chairman of the Board of Directors of the New Jersey State Medical Underwriters, Inc., reported there is to be an increase in professional liability insurance rates, averaging 6.6 percent.

The meeting of the Special Session was adjourned by Doctor Alessi at 1:30 p.m.

Board of Medical Examiners' Meetings

1980

January 9
February 13
March 12
April 9
May 14
June 18
July 9
August 13
September 10
October 8
November 12
December 10

CMDNJ Notes*

Stanley S. Bergen, Jr., M.D.
President

"This act shall be known and may be cited as the 'Medical and Dental Education Act of 1970.'.

"The Legislature and Governor of the State of New Jersey hereby find that the establishment and operation of a program of medical and dental education is in the best interest of the State to provide greater numbers of trained medical personnel to assist in the staff of the hospitals and public institutions and agencies of the State and to prepare greater numbers of students for the general practice of medicine and dentistry...

"There is hereby established in the Department of Higher Education the 'College of Medicine and Dentistry of New Jersey.' The exercise by the college of the powers conferred by this act in the presentation and operation of a program of medical and dental education shall be deemed to be public and essential governmental functions necessary for the welfare of the State and the people of New Jersey..."

Thus, with the introduction, on May 4, 1970, of Assembly Bill No. 1059, signed by Governor William T. Cahill on June 16, 1970, the College as it is known today came into being. Specifically, the act combined the Rutgers Medical School and the New Jersey College of Medicine and Dentistry "into a single entity to be known as the College of Medicine and Dentistry of New Jersey."

The upcoming tenth anniversary of CMDNJ offers us an opportunity to reflect upon a decade which began in turbulence, progressed through much growth and development, and reached toward fulfillment of the multiple mission of the College.

The history of medical and dental education in New Jersey actually goes back more than ten years. Indeed, the year 1980 also marks the 20th anniversary of the first graduating class of Seton Hall College of Medicine and Dentistry, which was the forerunner of CMDNJ. That continuity still exists, with several Seton Hall alumni on the College's current faculty. But for the sake of comparison, CMDNJ is a far different institution today than it was in 1970.

During the first year of CMDNJ's existence, there were 556 students enrolled in the College's four schools. Of these, 348 were candidates for the M.D. degree. With each passing year, the enrollment grew larger, and today there are 1,900 students enrolled in CMDNJ's six schools on three campuses. Of these, 1,005 are candidates for the M.D. degree and another 81 are candidates for the D.O. degree at the College's newest school, the CMDNJ-New Jersey School of Osteopathic Medicine.

At each of the two M.D. degree granting schools, the current enrollment is now larger than that of the total enrollment of 348 students in 1970. At CMDNJ-New Jersey Medical School, Newark, the number is now 590, while the CMDNJ-Rutgers Medical School, Piscataway, has a total 415 students.

In 1970, as the infant CMDNJ prepared for breaking ground a year later for its new $200-million campus in Newark, the physical facilities of the College consisted of the then four-year-old CMDNJ-Rutgers Medical School and the newly occupied interims buildings in Newark, along with the two teaching hospitals—the Martland Medical Center in Newark and the Raritan Valley Hospital in Green Brook, which was acquired during the year that witnessed the establishment of CMDNJ. Total faculty at the two schools numbered slightly over 150. To operate the institution then, CMDNJ received a 1970 state appropriation of a little more than $19 million.

Today, the Newark campus is virtually complete, with all six major structures, including the power plant for the complex, occupied and in operation. The newest of these, the $78.9 million, 520-bed College Hospital, replaced Martland a year ago this month. And Middlesex General Hospital, which became a major affiliate of CMDNJ in 1978, has begun the process of replacing Raritan Valley Hospital as the core teaching hospital for CMDNJ-Rutgers Medical School. At the College's schools, there are 2,471 full-time, part-time and volunteer faculty members. To operate the institution during the fiscal year 1980-81, the Department of Higher Education has recommended a budget of some $159 million.

Aside from the bricks and mortar, aside from the monetary costs, and aside from the cold statistics, there are many signs today that point to the growing stability and maturity of CMDNJ beyond its adolescent years. At the College's four medical schools and two teaching facilities, for instance, scientific programs and health care services unheard of in 1970 now are being offered almost routinely.

The College itself, because of its modern facilities, academic atmosphere

and perceptive faculty, is steadily becoming a preferred meeting place for distinguished national health groups. Besides the College's own sponsored seminars and conferences on subjects ranging from sports medicine and diabetes to depression and obstetrics, CMDNJ has played host in recent months to several national organizations, such as the Association for Academic Surgeons and the American Association for Cancer Education.

Over the past several months, the College also has received recognition of the high quality of its faculty. This fact has prompted the CMDNJ Board of Trustees at a recent meeting to give praise to the deans of the schools for their part in both the appointments and recognition of faculty members. As Board Chairman Stephen B. Wiley pointed out at that meeting: "We have gone through a period of growth, and this has tapered off to give us a chance to look at some of the more enduring issues and sense of directions."

As we enter our second decade, that sense of directions truly encompasses fulfilling the multiple missions of the College—those of research, service to the community and the State of New Jersey, and especially our primary mission of health profession education.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

Your Foundation extends greetings and best wishes for the New Year and the new decade. Each January calls for predictions for the next year. This one also summons estimates for the eighties —not, alas, the eighties of Diamond Jim Brady and Lillian Russell, but of the oil sheikhs and the disco palaces. It can be predicted that the effects of injury and disease on the human body will not change. Arguments over access, delivery, costs and accountability for the treatment of the unwell will intensify. Sociologists and economists will use their influence to adjust "health care" to their philosophies. This election year already has begun to amplify the discussion of national health insurance. In a recent issue of *The New England Journal of Medicine,* these words appear: "The physician's primary aim must always be to act in the interests of the *individual* patient. Therefore, the physician properly strives to mobilize all resources that might help the patient. This desire *may run counter to the social objective* of obtaining the greatest possible benefit to all from available resources," and: "A program of evaluation of medical practices will not resolve the dilemmas that may arise between the needs of the individual patient and those of society." (Emphasis added.)

This difference in approach is difficult to resolve, and may be the major obstacle to any meeting of the minds over medical issues. Doctors see patients one at a time, while those who think, plan, and compute consider thousands of cases. Some changes in attitudes on both sides will be needed. There is no doubt that many medical services cost too much, are unevenly distributed and may not be appropriate. Some alterations in how we do things will be made. Many plans will be brought forth. Most of these will not survive until 1990, but some will. Physicians must be willing to recognize and participate in those programs that appear to have promise. They must advise those outside the profession on what can be done to improve efficiency without sacrificing quality.

The prediction here is that the climate for medical practice will be better in 1990 than it is at present, but that there will be many inclement days in the interim.

[1]Fineberg H V and Hiatt H H: Evaluation of medical practices. *N Engl J Med* 301: 1086-1091, 1979.

NOTICE

The Academy of Medicine of New Jersey announces the removal of its office to:

Two Princess Road
Lawrenceville, NJ 08648

Telephone:
(609) 896-1717

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Stanley Goldstein, M.D., 1525 Millerspost Highway, Williamsville, NY 14221. New York Medical 1975. Sub-specialty, pediatrics. Board eligible (pediatrics) Solo, partnership, research. Available July 1980.

Prasad Srinivasan, M.D., 2951 S. King Drive, Apt. 1808, Chicago, IL 60616. Baroda (India) 1972. Special interests, immunology, pediatrics. Board certified (pediatrics). Partnership, single or multi-specialty group. Available July 1980.

Dfraim Lavi, M.D., 8320 SW 65th Avenue, Apt. 12, Miami, FL 33143. Sackler (Israel) 1975. Partnership, single or multi-specialty group. Available July 1980.

ANESTHESIOLOGY—Subhash Chander, M.D., 264-16 74th Avenue, Glen Oaks, New York 11004. Government College, Punjab (India) 1972. Solo, single-specialty group, institutional. Available July 1980.

Chung B. Park, M.D., 1925 Eastchester Road, Apt. 22-C, Bronx, NY 10461. Kyungpook (Korea) 1971. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Abhijit Desai, M.D., 435 E. 70th Street, Apt. 21-C, New York, NY 10021. Seth G.S. Medical (India) 1973. Board eligible. Partnership, single-specialty group, institutional. Available July 1980.

Dhan Raj, M.D., 308 North Hite, Apt. 10, Louisville, KY 40206. Osmania (India) 1973. Solo, partnership, multi-specialty group. Available July 1980.

Mukesh N. Gatha, M.D., 1935 Eastchester Road, Apt. 22-D, Bronx, NY 10461. B. J. Medical (India) 1972. Board eligible. Group, partnership. Available July 1980.

CARDIOLOGY—Barton E. Cohen, M.D., 166 East 34th Street, Apt. 10-G, New York, NY 10016. NYU 1973. Also, general internal medicine. Board certified (IM). Group, partnership. Available July 1980.

Sudhir Amaram, M.D., 1310 Pennsylvania Avenue, Apt. 12-E, Brooklyn, NY 11239. Osmania (India) 1973. Also general internal medicine. Board certified (IM). Partnership, group, solo. Available July 1980.

Roger N. Zitrin, M.D., 8 Micieli Place, Brooklyn, NY 11218. Rutgers 1974. Group, partnership, solo. Available January 1980.

Stephen K. Kwan, M.D., Deborah Heart and Lung Center, Browns Mills, NJ 08015. Natl. Defense Med. Center (Taiwan) 1972. Solo, group, hospital-based. Available July 1980.

M. Tejura, M.D., 3401 Gibralter Heights, Apt. J-5, Toledo, OH 43609. Topiwalla (India) 1974. Solo, partnership. Available July 1980.

CARDIOVASCULAR DISEASES—Alan Feit, M.D., 88 Howard Park Drive, Tenafly 07670. Columbia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

Joel A. Roffman, M.D., 282 Washington Street, Apt. B-2, Hartford, CT 06106. Boston 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Kandathil M. Mathew, M.D., 22 Woodland Park, Hartford, CT 06105. Kasturba (India) 1969. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, solo. Available July 1980.

Sudhir Amaram, M.D., 1310 Pennsylvania Ave., Apt. 12-E, Brooklyn, NY 11239. Osmania (India) 1973. Also, general internal medicine. Board certified (IM). Any type practice. Available July 1980.

James A. Quinn, M.D., 3 Washington Square, Euclid, OH 44143. Columbia 1974. Also, general internal medicine. Board eligible (IM). Single-specialty group, partnership, institutional. Available July 1980.

George Demidowich, M.D., 501 Stuyvesant Avenue, Irvington 07111. New York Medical 1975. Also, general internal medicine. Board certified (IM). Single-specialty group, partnership, solo. Available July 1980.

Arnold J. Greenspon, M.D., 922-C Chatham Lane, Columbus, OH 43221. University of Pennsylvania 1975. Also, general internal medicine. Board certified (1M). Single or multi-specialty group, institutional. Available July 1980.

Stanley M. Lewis, M.D., 14 Third Avenue, Branford, CT 06405. Albany 1975. Also, general internal medicine. Board certified (1M). Single or multi-specialty group, institutional. Available July 1980.

Vidyadhar R. Gandra, M.D., 1350 W. Bethune Avenue, Apt. 907, Detroit, MI 48202. Gandhi (India) 1972. Also, general internal medicine. Board certified (IM). Partnership, single-specialty group, solo. Available August 1980.

James D. Lynch, M.D., 3732 Lowell Road, Cleveland Heights, OH 44121. Hahnemann 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, general internal medicine. Board certified (1M). Single or multi-specialty group, partnership. Available July 1980.

DERMATOLOGY—David L. Cohen, M.D., 3228 Johnson Avenue, Riverdale, NY 10463. Mount Sinai 1976. Partnership, solo, multi-specialty group. Available July 1980.

Seymour Rand M.D., Case-Western Reserve University Hospital, 2065 Adelbert Road, Box 352, Cleveland, OH 44106. Medical College of Virginia 1975. Solo, partnership. Available July 1980.

ENDOCRINOLOGY—Howard M. Lando, M.D., 8105 Kane Court, Alexandria, VA 22308. Medical College of Virginia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, research. Available July 1980.

Jack Cukierman, M.D., 215 Stearns Hill Road, Waltham, MA 02154. SUNY-Buffalo 1975. Also, general internal medicine, with special interest in diabetes. Board eligible (IM). Single or multi-specialty group, partnership. Available July 1980.

Henry G. Fein, M.D., 2008 Baltimore Road, Apt. E-41, Rockville, MD 20851. Columbia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, institutional. Available July 1980.

FAMILY PRACTICE—Eric N. Kruger, M.D., Hunter Hills, G-4, Flemington 08822. Jefferson. Group, partnership, solo. Available July 1980.

James M. Lynch, Jr., M.D., 1623 Parkcrest Circle, Apt. 300, Reston, VA 22090. Guadalajara 1976. Single or multi-specialty group, partnership. Available July 1980.

Mark S. Weitman, M.D., 5615 Phillips Avenue, Apt. 3, Pittsburgh, PA 15217. SUNY-Buffalo 1977. Institutional, partnership, single-specialty group. Available July 1980.

GASTROENTEROLOGY—Norman Zitomer, M.D., 1113 Rodman Street, Philadelphia, PA 19147. SUNY-Downstate 1975. Also general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

Iftikhar A. Malik, M.D., 175 Willoughby Street, Apt. 5-F, Brooklyn, NY 11201. King Edward (Pakistan) 1973. Also, general internal medicine. Board eligible (IM). Solo, partnership, institutional. Available July 1980.

Ira E. Mayer, M.D., 3193-D Buford Highway, NE, Atlanta, GA 30329. New York Medical 1975. Also, general internal medicine. Board certified (IM). Research, single or multi-specialty group. Available July 1980.

John J. Sheehan, Jr., M.D., 589 Country Club Lane, Nashville, TN 37205. Pennsylvania State 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Prafulla K. Kirtane, M.D., 73-05 150th Street, Apt. 3-A, Flushing, NY 11367. Baroda (India) 1973. Also, general internal medicine. Board certified (IM). Solo, multi-specialty group, partnership. Available July 1980.

Allan M. Effron, M.D., P.O. Box 593, Woodcliff Lake 07675. Guadalajara 1974. Single or multi-specialty group, partnership. Available July 1980.

David L. Gottesman, M.D., 13357 Cedar Road, Cleveland Heights, OH 44118. NYU 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, solo. Available July 1980.

Indira R. Kalram, M.D., 34 Gardner Street, Apt. 43, Boston, MA 02134. Andhra (India) 1973. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

George M. Cibik, M.D., 2991 School House Lane P14W, Philadelphia, PA 19144. Albany 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

GENERAL PRACTICE—Thomas W. Lister, M.D., Route 3, Box 417 CD, Cameron, TX 76520. University of Texas 1968. Group, partnership, industrial, student health. Available.

Carlos A. Viola, M.D., 115 Oakglen #207, Port Lavaca, TX 77979. Buenos Aires 1950. Special interest, general surgery. Multi-specialty group, institutional, solo. Available.

HEMATOLOGY/ONCOLOGY—K K. Aggarwal, M.D., 1525 Millersport Highway, Apt. 304, Williamsville, NY 14221. Delhi (India) 1969 Board certified. Solo, institutional. Available July 1980.

INTERNAL MEDICINE—Patricia Costanzo, M.D., 12 Tory Court, Colts Neck 07722. CMDNJ 1974. Subspecialty, pulmonary medicine. Board certified. Any type practice. Available July 1980.

Thomas Pitoscia, M.D., 19 Upper Overlook Road, Summit 07901. Rush 1977. Multi-specialty group, partnership, industrial, academic. Available July 1980.

Mohammad A. Chaudhry, M.D., 16 Farmhouse Road, Mountain Top, PA 18707. King Edward (Pakistan) 1963. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Yallappa Nadiminti, M.D., 605 Louisiana Avenue, Apt. 168, Brooklyn, NY 11239. Government Medical College (India) 1973. Subspecialty, neoplastic diseases. Board certified. Solo, institutional, partnership, single or multi-specialty group. Available July 1980.

Douglas R. Shumaker, M.D., 7861 Jefferson Street, Hummelstown, PA 17036. George Washington University 1977. Partnership, single or multi-specialty group, solo, emergency room. Available July 1980.

Joel M. Cohen, M.D., 1131 University Boulevard West, Apt. 1404, Silver Spring, MD 20902. SUNY-Downstate 1975. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Sybil Kramer, M.D., 68 Winchester Street, Brookline, MA 02146. SUNY-Downstate 1975. Subspecialty, endocrinology. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Mark L. Friedman, M.D., 2901 S. King, Apt. 1003, Chicago, IL 60616. University of Chicago 1977. Subspecialty, emergency medicine. Single or multi-specialty group, partnership. Available July 1980.

Richard L. Rudolph, M.D., 124 Pearl Street, Red Bank 07701. CMDNJ 1976. Board eligible. Single or multi-specialty group, partnership. Available.

Robert H. Gordon, M.D., 5500 Wissahickon Ave., Apt. 405-C, Philadelphia, PA 19144. Jefferson 1975. Subspecialty, rheumatology. Board certified. Any type practice. Available July 1980.

Lawrence P. Saladino, M.D., 3428-B Alpine Court, Lexington, KY 40502.

Georgetown 1975. Subspecialty, emergency medicine. Institutional, multi-specialty group, emergency room. Available July 1980.

Laurence J. Clark, M.D., 5038 Cliffhaven Drive, Annandale, VA 22003. Georgetown 1975. Subspecialty, emergency medicine. Partnership, solo, emergency room. Available July 1980.

Devi P. Misra, M.D., 7K University Terrace, Columbia, MO 65201. SCB Medical College (India) 1967. Subspecialty, pulmonary medicine. Board certified. Solo, institutional, group. Available July 1980.

Jon Allen Kotler, M.D., c/o Dept. of Medicine, 1356 Lusitana Street, Honolulu, HI 96813. Emory 1976. Subspecialty, emergency medicine. Board eligible. Single or multi-specialty group, partnership. Available.

Howard L. Kramer, M.D., 4 Longfellow Place, Apt. 803, Boston, MA 02114. Florida 1975. Board certified. Single or multi-specialty group, partnership. Available February 1980.

Mirza M. Ashraf, M.D., West St. Road, Carthage, NY 13619. King Edward (Pakistan) 1967. Subspecialty, cardiovascular diseases. Solo, single-specialty group, institutional. Available.

Mohamed M. Haq, M.D., 10555 Fondren, Apt. 422, Houston, TX 77096. Osmania (India) 1973. Subspecialty, neoplastic diseases. Board certified. Single or multi-specialty group, research. Available July 1980.

Jay Kaplan, M.D., 140 Kane Street, Apt. D-2, West Hartford, CT 06119. Bologna (Italy) 1977. Partnership, single or multi-specialty group. Available July 1980.

Kandathil M. Mathew, M.D., 22 Woodland Park, Hartford, CT 06105. Kasturba (India) 1969. Subspecialty, cardiology. Board certified. Partnership or institutional. Available July 1980.

NEOPLASTIC DISEASES—Arlene A. Forastiere, M.D., 10 Waterside Plaza, Apt. 3-J, New York, NY 10010. New York Medical 1975. Subspecialty, hematology. Board certified (IM). Single-specialty group, institutional, research. Available July 1980.

NEPHROLOGY—Dinesh Shukla, M.D., 514 E. 88th Street, Apt. 2-B, New York, NY 10028. Maulana Azad (India) 1973. Subspecialty, general practice. Partnership, single or multi-specialty group. Available July 1980.

Alan S. Terlinsky, M.D., 1938 McFalls Street, McLean, VA 22101. Georgetown 1975. Also, general internal medicine. Board certified (IM). Partnership, solo, single-specialty group. Available June 1980.

Joon Koo Yeo, M.D., 5460 Bahama Terrace, Apt. 9, Cincinnati, OH 45223. Seoul (Korea) 1970. Also, general internal medicine. Board certified (IM). Partnership, single or multi-specialty group. Available July 1980.

NEUROLOGY—Eugene C. Madonia, M.D., 11105 Troy Road, Rockville, MD 20852. Georgetown 1976. Single or multi-specialty group, partnership. Available July 1980.

Richard B. Brooks, M.D., 1 David Lane, Yonkers, NY 10701. SUNY-Upstate 1976. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Chitpadi R. Dandillaya, M.D., 16 Harper Terrace, Cedar Grove 07009. Osmania (India) 1962. Also, general internal medicine. Board eligible. Multi-specialty group, partnership, solo. Available July 1980.

Palanivel G. Moorthy, M.D., Aring Neurology Center, Pavilion B, Buc Medical Center, Cincinnati, OH 45267. Kilpauk (India) 1968. Board eligible. Solo, partnership, multi-specialty group. Available July 1980.

Seung K. Rho, M.D., 1700 Seaspray Court, Apt. 1233, Houston, TX 77008 Seoul (Korea) 1970. Subspecialty, psychiatry. Board eligible. Solo, group or research. Available.

Ramanand C. Dandillaya, M.D., 16 Harper Terrace, Cedar Grove 07009. Osmania Medical 1963. Board eligible. Group, partnership, solo. Available July 1980.

Bong W. Chang, M.D., 1350 W. Bethune Avenue, Apt. 1209, Detroit, MI 48202. Seoul (Korea) 1972. Board eligible. Group or solo. Available April 1980.

OBSTETRICS/GYNECOLOGY—Sung Ho Lee, M.D., 400 Elruth Court, Apt. 141, Girard, OH 44420. Seoul (Korea). Solo, group, or associate. Available July 1980.

Robert J. Lipari, M.D., Jewish Hospital and Medical Center, 555 Prospect Place, Brooklyn, New York. Bologna (Italy) 1975. Board eligible. Group or partnership —flexible. Available July 1980.

Woo-Gill Jeong, M.D., 203 Churchill Hubbard Road, #4, Youngstown, OH 44505. Chonnam (Korea). Board eligible. Group or partnership. Available July 1980.

Dhanlakshmi Venkataraman, M.D., Kensington Arms, Apt. 22-B, Hightstown 08520. Jabalpur (India) 1969. Board eligible. Partnership, hospital-based, group, solo. Available June 1980.

Balu G. Kamalapurker, M.D., 150 55th Street, Brooklyn, NY 11220. Karnatak (India) 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Shawky N.F. Habashy, M.D., 1408 South Country Club, Carlsbad, NM 88220. Ain Shams University (Egypt) 1965. Board certified. Single or multi-specialty group, partnership. Available March 1980.

Michael T. Kicenuik, M.D., 49 Crescent Road, Livingston 07039. CMDNJ 1972. Board eligible. Any type practice. Available July 1980.

W.L. Schneiderman, M.D., 287 Belblossom Way, Los Gatos, CA 95030. New York Medical 1974. Board eligible. Group or partnership. Available March 1980.

Mohamed I. Abdel-Aziz, M.D., Spindrift Circle, Apt. 12-D, Baltimore, MD 21234. Alexandria (Egypt) 1969. Solo, group, partnership, institutional. Available July 1980.

Jyotsna S. Mehta, M.D., 729 Village Drive, Edison 08817. Seth (India) 1973. Single or multi-specialty group, partnership. Available July 1980.

Jose Cohen, M.D., 2627 Maxwell Street, Philadelphia, PA 19152. Cordoba (Argentina) 1974. Solo, partnership, single-specialty group. Available July 1980.

Inchul Park, M.D., 736 Carter Street, Apt. 12, Rochester, NY 14621. Seoul (Korea) 1972. Single or multi-specialty group, partnership. Available July 1980.

Rajan Jairam, M.D., 114 Franklin St., Apt. 2E1, Morristown 07960. Kasturba, Mangalore (India) 1972. Board eligible. Single or multi-specialty group, partnership. Available August 1980.

Khalid Parwez, M.D., 420 Stockholm Street, Apt. C-9, Brooklyn, New York 11237. Nishtar (Pakistan) 1971. Partnership, solo, single or multi-specialty group. Available July 1980.

Ambalavanar Somaskanda, M.D., 4002 Yeager Drive, Nimitz Village, Great Lakes, IL 60088. University of Ceylon (Sri Lanka) 1967. Board eligible. Single or multi-specialty group, partnership, or solo. Available August 1980.

Robert A. Stern, M.D., 7 Balint Drive, Apt. 128, Yonkers, NY 10710. New York Medical 1976. Partnership, single or multi-specialty group. Available July 1980.

Robert L. Daniels, M.D., 60 Haven Avenue, Apt. 9-E, New York, NY 10032. Columbia. Board eligible. Group or partnership. Available July 1980.

ONCOLOGY—Dinesh N. Patel, Antoinette Place, Apt. 111-E, Indianapolis, IN 46227. Baroda (India) 1972. Also, general internal medicine. Board eligible (IM). Partnership, single or multi-specialty group, institutional, solo. Available July 1980.

OPHTHALMOLOGY—Jay R. Rowes, M.D., 6144 Park Avenue, Indianapolis, IN 46220. Cornell 1976. Board eligible (IM). Solo, partnership, single-specialty group. Available December 1981.

Arthur N. Landau, M.D., 327 East 58th Street, New York, NY 10022. Albert Einstein 1975. Solo, partnership, single-specialty group. Available July 1980.

Melvyn H. Defrin, M.D., 1889 Camberley Circle, Memphis, TN 38138. SUNY-Stony Brook 1975. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

Paul R. Singer, M.D., 2160 Pheasant Run, St. Louis, MO 63043. University of Rochester 1973. Board certified. Single or multi-specialty group, solo. Available June 1980.

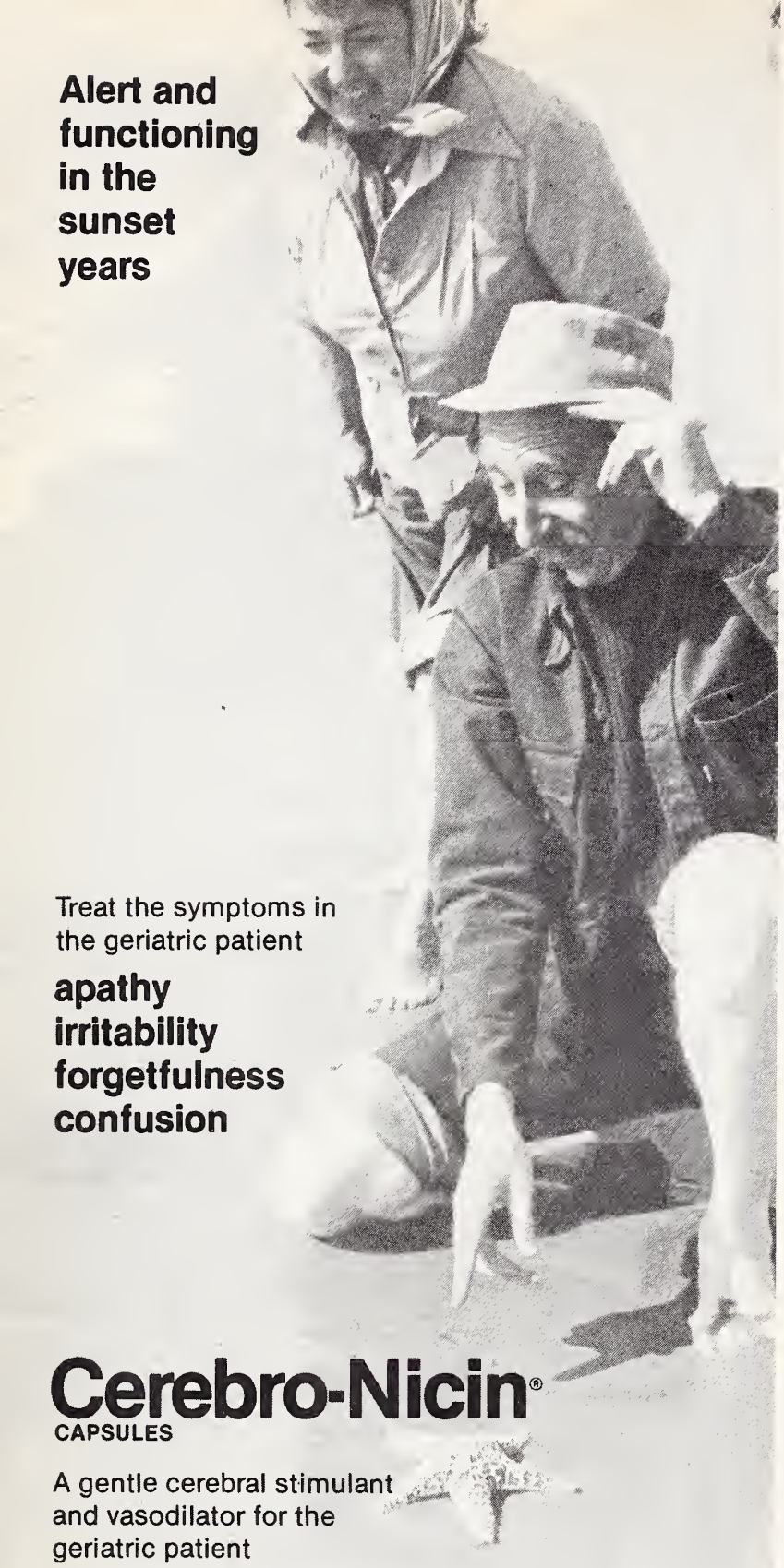
Jeffrey L. Oberman, M.D., 5600 Munhall Road, Pittsburgh, PA 15217. Albany Medical 1976. Board eligible. Partnership, single-specialty group, solo. Available July 1980.

Aly Sergie, M.D., 1815 Greenwich Woods Drive, Apt. 33, Silver Spring, MD 20903. Aleppo 1973. Solo, single-specialty group, partnership. Available July 1980.

Teofil B. Kulyk, M.D., 435 East 70th Street, New York, NY 10021. CMDNJ 1976. Board eligible. Solo, partnership, single-specialty group. Available July 1980.

Robert F. Stephens, M.D., 502 Woodside Ave., Narberth, PA 19072. Washington University 1971. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Frederick A. Isaacs, M.D., 1234 Midland Avenue, Bronxville, NY 10708. New York



Alert and functioning in the sunset years

Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:

Pentylenetetrazole	100 mg.
Nicotinic Acid	100 mg.
Ascorbic Acid	100 mg.
Thiamine HCL	25 mg.
l-Glutamic Acid	50 mg.
Niacinamide	5 mg.
Riboflavin	2 mg.
Pyridoxine HCL	3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Medical 1976. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

OTORHINOLARYNGOLOGY—Howard Taylor, M.D., 1560 North Sandburg Terrace, Apt. 3408, Chicago, IL 60610. Columbia 1976. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

David Ahmadi, M.D., 436 E. 69th Street, New York, NY 10021. Tehran (Iran) 1968. Subspecialty, head and neck surgery. Board eligible. Multi-specialty group, administrative, partnership, solo. Available July 1980.

Didier L. Peron, M.D., 2 Crest Avenue, Larchmont, NY 10538. Paris 1969. Special interest, otology. Single or multi-specialty group, partnership, solo. Available July 1980.

PATHOLOGY—Arthur R. Copeland, M.D., 826 Goler House, Rochester, NY 14620. Albany 1976. Both AP/CP. Board eligible. Group. Available July 1980.

PEDIATRICS—Raksha J. Gajarawala, M.D., 36 Everett Road, Demarest 07627. N.H.L. (India) 1967. Board eligible. Group or partnership. Available.

Asha N. Madia, M.D., 5015 S.W. 9th Street, Apt. #97, Des Moines, IA 50315. Seth G.S. (India) 1970. Board eligible. Clinic practice. Available.

Masond Ahdieh, M.D., 69-49 44th Avenue, Woodside, NY 11377. Tabriz (Iran) 1972. Multi-specialty group, institutional, emergency room. Available July 1980.

Mohammed H. Nomaan, M.D., 856 W. Nelson Street, Apt. 501, Chicago, IL 60657. Khyber (Pakistan) 1976. Board eligible. Institutional, multi-specialty group, partnership, research, public health or school health. Available July 1980.

Mohammad Yusaf, M.D., 7367 Hardscrapple Drive, Apt. C, St. Louis, MO 63123. King Edward (Pakistan) 1975. Multi-specialty group, institutional, solo, emergency room. Available July 1980.

Wijepala Kottahachchi, M.D., 37 Judson Street, Apt. 10-B, Edison 08817. University of Ceylon (Sri Lanka) 1969. Partnership, single-specialty group, solo. Available July 1980.

Walayat A. Khan, M.D., P.O. Box 634, Graceville, FL 32440. King Edward (Pakistan) 1971. Board eligible. Solo, emergency room. Available.

Dhanireddy Ramasubbareddy, M.D., 212 Congressional Lane, Apt. T-2, Rockville, MD 20852. Kurnool Medical (India) 1974. Any type practice. Available July 1980.

Dipak S. Banker, M.D., 436 E. 69th Street, Apt. 1-D, New York, NY 10021. G.S. Medical (India) 1971. Subspecialty, hematology. Board certified. Solo, partnership, single or multi-specialty group. Available July 1980.

Alan R. Rushton, M.D., 181 Hotchkiss Grove Road, Branford, CT 06405. University of Chicago 1977. Single or multi-specialty group, institutional. Available July 1980.

Bernard L. Lipman, M.D., 8261 Temple Road, Philadelphia, PA 19150. Univ. of South Carolina 1939. Special interest,

pediatric allergy. Board certified. School health, institutional. Available.

S. Rajaram, M.D., 24 Wendy Lane, Charleston, SC 29407. Stanley Medical (India) 1969. Board eligible. Group, solo, partnership, government. Available February 1980.

R. Veluswamy, M.D., 450 West End Avenue, Apt. 5, North Plainfield 07060. Madras (India) 1973. Board eligible. Institutional, solo, group, partnership. Available July 1980.

Mark S. Ginsburg, M.D., 73-02 263rd Street, Glen Oaks, NY 11004. Medical College of Ohio 1977. Single or multi-specialty group, partnership. Available July 1980.

Martin M. Fisher, M.D., 264-10 74th Avenue, New Hyde Park, NY 11004. Einstein 1975. Board eligible. Partnership, multi-specialty group, institutional. Available July 1980.

Gita S. Sikand, M.D., 721 Westwood Drive, Apt. 2-B, Clayton, MO 63105. All-India 1972. Special interest, hematology. Board certified. Partnership, multi-specialty group, institutional. Available July 1980.

Augusto Pimazoni-Netto, M.D., Rua Jose Getulio 78 Aclima Cao, CEP, Sao Paulo, Brazil 01509. University of Sao Paulo, 1965. Administrative, industrial. Available January 1981.

PHYSICAL MEDICINE/REHABILITATION— Aaron M. Levine, M.D., Box 2128-2111 Holly Hall Drive, Houston, TX 77054. University of Pittsburgh 1971. Institutional, research, solo. Available July 1980.

Dinesh C. Shah, M.D., 334 83rd Street, Brooklyn, NY 11209. M.P. Shah (India) 1969. Institutional, multi-specialty group, solo, emergency room. Available July 1980.

PSYCHIATRY—Jean P. Marachi, M.D., 1251 Boulevard, New Haven, CT 06511. University of Miami 1975. Board eligible. Special interest, child psychiatry. Partnership, institutional, research. Available September 1980.

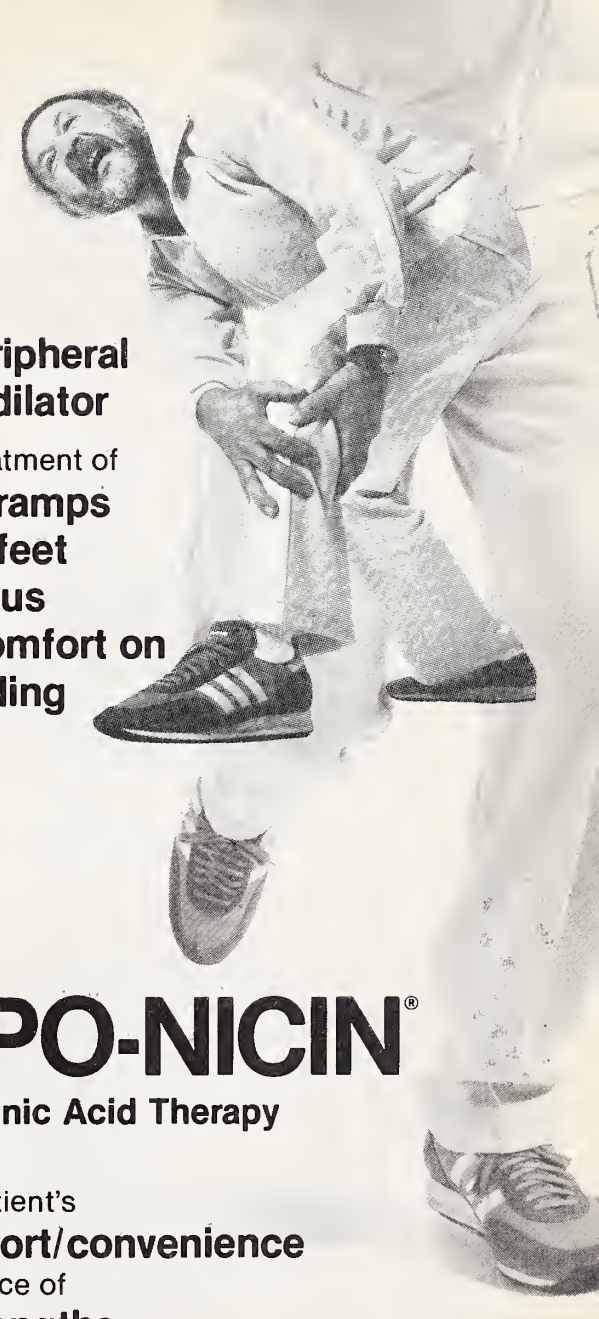
Melvin W. Cohen, 681 Clarkson Avenue, Brooklyn, NY 11203. Meharry 1968. Board certified. Institutional, multi-specialty group, research. Available July 1980.

John F. McGrail, M.D., 1819 Russet Drive, Cherry Hill 08003. University of Ottawa 1961. Board certified. Single or multi-specialty group, partnership. Available June 1980.

PULMONARY MEDICINE—Leonard Sonne, M.D., 191 Beacon Street, Boston, MA 02116. New York Medical 1974. Also general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

Michael Falkowitz, M.D., 245-20 Grand Central Parkway, Bellerose, NY 11426. SUNY-Downstate 1975. Also general internal medicine. Board certified (IM). Group, partnership, or hospital-based setting. Available July 1980.

David L. Kamelhar, M.D., 160 East 27th Street, New York, NY 10016. NYU 1974. Also general internal medicine. Board certified (IM). Group, partnership, or hospital. Available July 1980.



A peripheral vasodilator

for treatment of
leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's
comfort/convenience
in choice of
3 strengths

Gradual Release
LIPO-NICIN®/300 mg.

Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release
LIPO-NICIN®/250 mg.

Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Frederick E. Cosco, M.D., 10 Waterside Plaza, Apt. 3-J, New York, NY 10010. Georgetown 1974. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Thomandram S. Sekar, M.D., 100 Tremont Street, Apt. 1, Brighton, MA 02135. Stanley (India) 1970. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

RADIOLOGY—Anil G. Desai, M.D., 701 Red Bank Avenue, Apt. G-10, Woodbury 08096. Special interest, diagnostic radiology and nuclear medicine. Baroda (India) 1972. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Thomas R. Fitzsimons, M.D., P.O. Box 73, Hellertown, PA 18055. Penn State 1973. Special interest, diagnostic radiology. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Arunugam Ramasubramaniam, M.D., 430 East 67th Street, Apt. 8-J, New York, NY 10021. Madras (India) 1970. Board eligible. Any type practice. Available.

Hariprasad P. Kurella, M.D., 590 Flatbush Avenue, Brooklyn, NY 11225. Sri Venkateswara 1971. Board certified. Group, partnership, solo. Available.

Robert S. Nuba, M.D., 73-23 210 Street, Bayside, NY 11364. Guadalajara 1975. Special interest, diagnostic radiology. Single or multi-specialty group, partnership. Available July 1980.

Stephen J. Fischer, M.D., 145 East 15th Street, Apt. 12-U, New York, NY 10003. Wisconsin 1975. Special interest/diagnostic radiology. Board certified. Group, hospital. Available.

RHEUMATOLOGY—Richard D. Gordon, M.D., 37 Outlook Drive, Apt. 31. Worcester, MA 01602. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

SURGERY, CARDIOVASCULAR—Louis T. Kanda M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Special interest, thoracic surgery. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

SURGERY, GENERAL—Louis-Joseph Auguste, M.D., 192-15B 64 Circle. Apt. 1-B, Fresh Meadows, NY 11365. Port au Prince, Haiti 1973. Special interest, abdominal surgery. Research, institutional, multi-specialty group. Available July 1980.

Asif Husain, M.D., 56 Anderson Avenue, Englewood Cliff 07632. Dow (Pakistan) 1973. Special interest, general practice. Board eligible. Single or multi-specialty group, solo. Available July 1980.

Hardas Rathod, M.D., 4985 Hawaiian Terrace, Cincinnati, OH 45223. Baroda (India) 1970. Partnership. Available July 1980.

Mohammed Sabir, M.D., 43 Maple Street, Addison, NY 14801. King Edward (Pakistan) 1967. Board certified. Solo, partnership, single-specialty group. Available June 1980.

Mohammand A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liaquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roc Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Bethune Av., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.

SURGERY, NEUROLOGICAL—Syed J. Shahid, M.D., 157 Corbin Place, Brooklyn, NY 11235. Dow Medical (Pakistan) 1972. Single or multi-specialty group, solo. Available February 1980.

SURGERY, ORTHOPEDIC—Philip D'Ambrosio, M.D., 4 Maple Drive. Apt. 5-L, Great Neck, NY 11021 Georgetown 1976. Group. Available July 1980.

William Stratford, M.D., 16 Bennett Village Terrace, Buffalo, NY 14214. SUNY-Buffalo 1975. Solo, partnership, single-specialty group. Available July 1980.

Lewis Preschel, M.D., 104-40 Queens Boulevard, Forest Hills, NY 11375. SUNY-Downstate 1975. Board eligible. Partnership. Available July 1980.

SURGERY, PLASTIC—Donald F. Clukies, M.D., 681 Richardson Road, Rochester, NY 14623. Upstate (Syracuse, NY) 1973. Special interest, head and neck surgery. Board eligible (general surgery). Partnership, single or multi-specialty group. Available July 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Sidney Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available June 1980.

UROLOGY—Daniel P. Wiener, M.D., 3226 Steuben Avenue, Bronx, NY 10467. Einstein 1974 Board eligible. Group, solo, partnership, academic P/T. Available July 1980.

G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

LETTERS TO THE JOURNAL

Medicare and Deceased Patients

October 24, 1979

Dear Dr. Krosnick:

I wish to reopen an ethical as well as a legal point concerning Medicare assignment of deceased patients. Many patient's families want to pay deceased patient's bills but are both confused by and unfairly subject to Medicare laws. Medicare will neither pay the family nor the doctor unless assignment is accepted (in most cases, less than half the bill) or unless the bill is fully paid by the family. This leaves most families with the burden of paying the entire bill, and then filing for Medicare reimbursement.

I have personally writen to my Senator and Congressman who inform me that this case is true, and agree with the unfairness of the law. Certainly families of deceased patients should pay off their obligations, and Medicare needs to be more responsive in helping with such large bills.

(signed) Stephen A. Anish, M.D.

Role of NJSDH in Maternal and Child Health Program

November 1, 1979

Dear Dr. Krosnick:

We commend you and the Publication Committee for publishing the article "Maternal Deaths in New Jersey—1977" by Dr. James P. Thompson, and the editorial "Maternal Mortalities: Utilization of Data" by Dr. James R. Jones, in the October 1979 issue of *The Journal* of the Medical Society of New Jersey. What is omitted in both these papers is the major role that the Maternal and Child Health Program of the New Jersey State Department of Health has played, not only in the collection and compilation of the data, but also as a catalyst to the obstetricians on the Committee on Maternal and Child Care, to review maternal deaths as an educational experience and to educate a greater number of obstetricians in a manner acceptable to themselves. New Jersey is one state where to quote Dr. Jones ". . . collecting the data and simply sequestering them away in a statistical survey buried in a state ledger. . ." is not the case. We want to emphasize the significant investment in time and effort the Department of Health has extended, in a cooperative activity with the Medical Society, toward this important public health activity.

(signed) Joanne E. Finley, M.D.

Soft Tissue Injuries

November 15, 1979

Dear Dr. Krosnick:

I wish to compliment Dr. Alan Wasserstrum for his excellent article on Soft Tissue Injuries Secondary to Doxorubicin Hydrochloride (*J Med Soc NJ* 76:838-840, 1979). Since this drug is commonly used in chemotherapeutic situations it is not uncommon for a plastic surgeon to see and treat skin sloughs due to this agent.

I think it should be strongly emphasized that these wounds are extremely deceptive. This is evident in reviewing Dr. Wasserstrum's three cases. Although the wound may look surgically fit for the acceptance of a split thickness skin graft, *do not* routinely expect acceptance of that graft. The surgeon is lucky if he can get fifty percent of his graft tissue to survive the first grafting procedure and often a second procedure is indicated.

Lastly, beware of the patient who may be on corticosteroids at the same time. I had experience with one such case; the graft appeared to take one hundred percent initially. However, the graft proceeded to slough over a long period of time and finally totally separated about one month after the grafting procedure, with, in essence, a one hundred percent loss of the graft. The extensor tendons are almost universally lost once they are exposed with this particular drug slough process. Trying to save them is often a futile effort.

Thank you.

(signed) John L. Krause, Jr., M.D.

Infant Formulas

November 16, 1979

Dear Colleague:

Over the past several months, a number of events have drawn attention to health hazards that can result from the use of infant formulas. While these products have a good safety record going back many years, breakdowns in processing and improper handling have resulted in problems involving nutritional content and contamination that can lead to serious health consequences, especially among infants for whom formula is the sole source of food.

Over the past several months, infant formulas have been involved in an increasing number of health-related problems. Ranging from nutrient deficiencies to processing breakdowns, these events have served to focus attention on procedures necessary to assure the quality and safety of these products.

FDA advises that all hospitals and other health facilities immediately begin to evaluate their procedures for storage, distribution, and preparation of infant formulas to identify possible points of contamination and/or reduction in nutritive value.

In addition, FDA needs to have more information on infant illnesses in which formulas may be implicated. The Agency would welcome information on the clinical nature of such illnesses, any supportive laboratory findings, the product or products that may be involved, the time that the problem occurred, and the length of time the formula was used. This information should be sent to FDA's Bureau of Foods, HFF-1, 200 C

Street, S.W., Washington, D.C. 20204.

FDA is reevaluating its procedures for assuring the quality and nutritional efficacy of infant formulas. The Agency is considering the establishment of standards for nutritional quality, as well as development of procedures for requiring premarket clearance of such formulas.

FDA also is considering the establishment of required quality assurance checks as part of food manufacturing practice for each such product. Early in 1980, FDA will hold the first of a series of international conferences to determine which nutrients need to be checked routinely and which nutrients need to be evaluated only under special conditions. In addition, these conferences will explore the scientific basis for construction of these standards.

(signed) Kenneth Flieger
Acting Deputy Associate
Commissioner for Health
Affairs, FDA, DHEW

CME CALENDAR

This listing is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the College of Medicine and Dentistry of New Jersey. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

Feb.

1, 8, 15, 22, 29 **Urology Grand Rounds**
3-5 p.m.—NJ Medical School, Newark
(CMDNJ NJ and AMNJ

5 **Infectious Diseases**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

6 **Thyroid Diseases**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

6 **Cardiac Rehabilitation**
11:30 a.m.-1 p.m.—Rahway Hospital
(AMNJ)

6 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

6, 13, 20, 27 **Endocrinology Series**—Grand Rounds
11:30 a.m.-1 p.m.—Rotates between Newark Beth Israel Medical Center, College Hospital, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

6, 13, 20, 27 **Medical Lecture Series**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

6, 13, 20, 27 **Endocrine Conferences**
3:30-5 p.m.—Rotates between Newark Beth Israel Medical Center, College Hospital, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

6, 13, 20, 27 **Medical Lecture Series**
1-3 p.m.—Christ Hospital, Jersey City
Christ Hospital and AMNJ)

6, 13, 20, 27 **Advances in Medicine**
9:30 a.m.-11 a.m.—Bergen Pines County Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

6, 13, 20, 27 **Common Office Skin Problems**
Nutrition in Clinical Practice
Classification of Headaches
Advances in Cardiological Diagnosis
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital, AMNJ and AAFP)

9-10 **Advanced Cardiac Life Support Provider Course**
8 a.m.-5 p.m.—Bergen County Dental Society at Fairleigh-Dickinson, Teaneck
(Bergen Co. Heart Assn. and AMNJ)

9, 16 **Upper Respiratory Infections**
Physical Medicine—Pain and Disability
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

12 **Immunofluorescence in Dermatologic Diagnosis**
8-10 p.m.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

13, 20, 27 **Low Back Pain**
1:30 p.m.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

13, 20, 27 **Medical Lecture Series**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

19 **Laboratory Interpretations**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

19 **Vasodilator Therapy in Cardiology**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

19 **Glucose Monitor**
7 p.m.—Irvington General Hospital
(AMNJ)

19 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ and AMNJ)

20 **An Update of Respiratory Control**
11:30 a.m.-1 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

21 **Testis, Bladder and Prostate Cancer**
5-6:30 p.m.—Somerset Medical Center
(Somerset Medical Center and AMNJ)

25 **Staphylococcus Infections**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

27 **Mitral Valve Disease**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside, Dover General, St. Clare's Hospitals and AMNJ)

Mar.

4 **Allergy**
9 a.m.—Freehold Area Hospital
(AMNJ)

4 **Chronic Renal Failure**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

5 **Proper Use of Endoscopy**
11:30 a.m.-1 p.m.—Rahway Hospital
(AMNJ)

5 **Arrhythmias**
1-3 p.m.—Christ Hospital, Jersey City
(AMNJ)

5 **Eighth Joint Conference**
9:30 a.m.-3:30 p.m.—Coachman Inn, Cranford
(New Jersey Thoracic Society, NJ Chapter American College of Chest Physicians and AMNJ)

5 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

5 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

5 **Adult Respiratory Distress Syndrome and Pulmonary Edema**
12 **Update on Genitourinary Cancer**
26 **Antibiotics and Antibiotic Resistance**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital, AAFP and AMNJ)

5 **Advances in Medicine**
12 9:30-11 a.m.—Bergen Pines Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

5 **Endocrinology Conferences**
12 3:30-5 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

6-7 **Pulmonary Arts Conference**
Holiday Inn, Route #1, North Brunswick
(Delaware-Raritan Lung Association)

7-9 **21st Annual Postgraduate Seminar**
Hyatt House, Cherry Hill
(NJ State Society of Anesthesiologists and AMNJ)

7 **Urology Grand Rounds**
14 3-5 p.m.—NJ Medical School,
21 Newark
28 *(CMDNJ and AMNJ)*

8 **Dept. of Medicine Visiting Professor Medical Grand Rounds**
12:30-1:30 p.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

8 **Evaluation of the Impotent Male**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

11 **Connective Tissue Disorders**
8-10 p.m.—Schering Corp., Kennilworth
(NJ Dermatological Society and AMNJ)

11 **Reflux Nephropathy**
8-9 a.m.—St. Peter's Medical Center, New Brunswick
(Nephrology Society of NJ and AMNJ)

11 **Reflux Nephropathy**
12 noon-1 p.m.—Middlesex General Hospital, New Brunswick
(Nephrology Society of NJ and AMNJ)

12 **Medical Lecture Series**
19 1-3 p.m.—Christ Hospital, Jersey City
26 *(Christ Hospital and AMNJ)*

13 **Ultrasound in Ophthalmology**
7:30-9:30 p.m.—Location to be announced
NJ Institute of Ultrasound in Medicine and AMNJ)

13 **Insect Allergies**
8-9 p.m.—Burlington Co. Memorial Hospital, Mount Holly
Burlington Co. Med. Society and AMNJ)

17 **Inflammatory Bowel Disease, Part II**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

18 **Fluid and Electrolyte Imbalance**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

18 **Immunology**
8:30 p.m.—Fair Lawn Memorial Hospital
(AMNJ)

18 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ and AMNJ)

19 **Interactions between Science Reporting and Medical Achievement**
11:30 a.m.- 1 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

20 **Hepatitis Update**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

25 **Diagnosis of Peripheral Vascular Disease**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

26 **Vitamins**
9:30-11:30 a.m.—Riverside Hospital Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

29 **11th Annual Seminar—Sports Medicine**
Valley Hospital, Ridgewood
(The Valley Hospital)

NEUROLOGY/PSYCHIATRY

Feb.

4 **Anorexia Nervosa-Twenty Years Later**
8-10 p.m.—39 Crescent Ave., Passaic
(Essex Psychiatric Seminary and AMNJ)

4 **Neuroscience Conferences**
11 11:30 a.m.-12:30 p.m.—Bergen Pines
18 County Hospital, Paramus
25 *(Bergen Pines County Hospital and AMNJ)*

5 **Psychiatric Case Conference**
12 7:30-9:30 a.m.—Trenton Psychiatric
19 Hospital
26 *(Trenton Psychiatric Hospital and AMNJ)*

5 **Seminar on Law and Psychiatry**
12 3:30-5:30 p.m.—Rutgers Law School
19 *(Rutgers University Law School*
26 *and AMNJ)*

6 **Distinguished Speakers Series**
20 1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

6 **Psychiatric Lecture Series**
13 1-3 p.m.—Ancora Psychiatric Hospital
20 *(Ancora Hospital and AMNJ)*

6 **Ongoing Child Psychiatry Case**
13 **Conference and Lecture**
20 8:30-10:30 a.m.—Trenton Psychiatric
27 (Hospital
(Trenton Psychiatric Hospital and AMNJ)

7 **Narcissism, Sleep and the Dream**
8:30 p.m.—Hackensack Hospital
(NJ Psychoanalytic Society and AMNJ)

7 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advances Psychiatric Study Group and AMNJ)

7 **Psychiatric Lecture Series**
14 11 a.m.-12 noon—Greystone Park
21 Psychiatric Hospital
28 *(Greystone Park Psychiatric Hospital and AMNJ)*

13 **Psychiatric Syndromes in Medical Disease**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

13 **Grand Rounds in Psychiatry and Mental**
27 **Health Science**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

20 **Special Problems in Neurology**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

20 **Confidentiality (Privileged Communication)**
1:30 p.m.—Trenton Psychiatric Hospital
(AMNJ)

20 **Hypnosis**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(The Carrier Foundation and AMNJ)

23 **Pediatric Head Injuries**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

Mar.

3 **Recurrent Delusion in a Girl**
8-10 p.m.—111 Ridgewood Ave., Glen Ridge
(Essex Psychiatric Seminar and AMNJ)

3 **Neuroscience Conferences**
10 11:30 a.m.-12:30 p.m.—Bergen Pines
17 County Hospital, Paramus
24 *(Bergen Pines County Hospital and*
31 *AMNJ)*

4 **Psychiatric Case Conferences**
11 7:30-9:30 a.m.—Trenton Psychiatric
18 Hospital
25 *(Trenton Psychiatric Hospital and AMNJ)*

4 **Seminar on Law and Psychiatry**
11 3:30-5:30 p.m.—Rutgers Law School
18 *(Rutgers University Law School*
25 *and AMNJ)*

5 **Utilization of DSM-111 Criteria for Affective Disorders for Pharmocological Management**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

5 **DSM-111 and Its Impact on Psychiatry**
19 To be announced
1:30-3 p.m.—N.J. Medical School, Newark
(CMDNJ and AMNJ)

5 **Consultation-Liaison Psyehiatry**
12 **Women as Patients—Changing Stresses and Parameters**
19 **Patients with Chronic Illness**
1-3 p.m.—Ancora Psychiatric Hospital
(Ancora Psychiatric Hospital and AMNJ)

5 **Child Psychiatry Case Conference**
12 8:30-10:30 a.m.—Trenton Psychiatric
19 Hospital
26 *(Trenton Psychiatric Hospital and AMNJ)*

6 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

THE THIRD ANNUAL
EDWARD G. WATERS
GYNECOLOGIC CONFERENCE

Presented by the Department of Obstetrics and Gynecology of the New Jersey Medical School—CMDNJ at Resorts International Hotel, Atlantic City, New Jersey.

WORKSHOPS on April 10, 1980
GYNECOLOGY CONFERENCE on April 11-13, 1980

For further information, please contact Herik Caterini, M.D., Department of Obstetrics and Gynecology, New Jersey Medical School, 100 Bergen Street, Newark, New Jersey 07103. (201) 456-6480.

CONTINUING EDUCATION CREDITS:

	Workshops April 10	Conference April 11-13
AMA Credits Category I:	5	20
ACOG Cognates:	5	17
AAFP Prescribed Credits:	5	17
AOA Credits Category 2-D:	5	16
NJSNA Credit Hours:	5	20 (pending)

THE ENVIRONMENTAL SCIENCES LABORATORY
(DEPARTMENT OF COMMUNITY MEDICINE)
and
THE PAGE AND WILLIAM BLACK
POST-GRADUATE SCHOOL OF MEDICINE
of the MOUNT SINAI SCHOOL OF MEDICINE (CUNY)

Announce a Postgraduate Course

SCIENTIFIC BASIS FOR PUBLIC HEALTH CONTROL OF ASBESTOS—RELATED DISEASE

Under the Direction of
IRVING J. SELIKOFF, M.D.
with Faculty of the Mount Sinai School of Medicine
and Guest Lecturers

February 11, 12, 13, 14, 1980
MONDAY through THURSDAY
9:00 AM to 5:00 PM—4 SESSIONS

This course will be given at the Mount Sinai Medical Center, New York City, New York. As an organization accredited for continuing medical education, The Page and William Black Post-Graduate School of Medicine of the Mount Sinai School of Medicine (CUNY) certifies that this continuing medical education offering meets the criteria, hour for hour, for Category I credit of the Physician's Recognition Award of the American Medical Association, provided it is used and completed as designed.

APPLY TO: Director, The Page and William Black Post-Graduate School of Medicine, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, New York 10029. Tel.: (212) 650-6737.

6 **Psychiatric Lecture Series**
13 11 a.m.-12 noon—Greystone Park
20 Psychiatric Hospital
27 *(Greystone Park Psychiatric Hospital and AMNJ)*

7 **Psychiatric Lecture Series**
14 1:30-5 p.m.—Trenton Psychiatric
21 Hospital
28 *(Trenton Psychiatric Hospital and AMNJ)*

7 **Joint Meeting with the NJ Psychiatric Association**
8:30-10:30 p.m.—Ramada Inn, Clark
(NJ Psychoanalytic Society and AMNJ)

12 **Grand Rounds in Psychiatry and**
26 **Mental Health Science**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

19 **Update on Laboratory Interpretations**
1:30 p.m.—Trenton Psychiatric Hospital
(AMNJ)

19 **Essentials of the Neurologic Examination**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital, AAFP and AMNJ)

19 **Social, Cultural and Intrapsychic Conflict in a Professional Woman**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(The Carrier Foundation and AMNJ)

19 **Special Problems in Neurology**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

OBSTETRICS/GYNECOLOGY

Feb.

6 **Lectures in Obstetrics and Gynecology**
8-10 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

2 **Combined Grand Rounds in Ob/Gyn**
13 3-5 p.m.—Rotates between CMDNJ-
20 College Hospital, Newark Beth Israel
27 and St. Michael's Medical Centers, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

7 **Grand Rounds in Obstetrics and**
14 **Gynecology**
21 4-5 p.m.—College Hospital, Newark
28 *(CMDNJ and AMNJ)*

Mar.

5 **Distinguished Lectures in Obstetrics/Gynecology**
8-10 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

5 **Grand Rounds in Ob/Gyn**
12 3-5 p.m.—Rotates between College
19 Hospital, Newark Beth Israel
26 and St. Michael's Medical Centers, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

6 **Grand Rounds in Ob/Gyn**
13 4-5 p.m.—College Hospital, Newark
20 *(CMDNJ and AMNJ)*
27

21 **Ob/Gyn Amenorrhea**
12 noon—Freehold Area Hospital
(AMNJ)

PATHOLOGY

Feb.

9 **Forensic Science Topics Impacting on Community Pathologist**
9 a.m.-5:30 p.m.—Institute of Pathology, Cherry Hill
(Institute of Pathology and AMNJ)

12 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

12 **Pathology Lecture**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

Mar.

11 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

11 **Pathology Lecture**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

PEDIATRICS

Feb.

5 **Meningitis in Pediatrics**
9 a.m.—Freehold Area Hospital
(AMNJ)

18 **Long-Term Outlook of High-Risk Infants**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

23 **Pediatric Head Injuries**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

Mar.

17 **Neonatal Screening—Genetic/Metabolic**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

22 **Modern Pediatric Ophthalmic Surgery**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

RADIOLOGY

Feb.

13 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

21 **Topic to be announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Diagnostic Radiology Section for Northern NJ and AMNJ)

Mar.

12 **Body CAT Scanning**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

12 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Radiological Society of NJ and AMNJ)

19 **Dinner Meeting**
6:30-8:30 p.m.—The Manor, West Orange
(Radiotherapy Section, AMNJ)

20 **Topic to be announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Diagnostic Radiology Section for Northern NJ and AMNJ)

GENERAL SURGERY

Feb.

4 **Distinguished Lecture Series in**
11 **Surgery and Grand Rounds**
25 4:30-5:30 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

5 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

5 **Tumor Conferences**
12 11 a.m.-12 noon—Morristown
19 Memorial Hospital
26 *(Morristown Memorial Hospital and AMNJ)*

6 **Surgical Topic**
1-3 p.m.—Christ Hospital, Jersey City
(AMNJ)

15 **Colon/Rectal Cancer**
12 noon—Freehold Area Hospital
(AMNJ)

22 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

26 **Abdominal Aortic Aneurysms**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

Mar.

3 **Distinguished Lecture Series in**
10 **Surgery and Grand Rounds**
17 4:30-5:30 p.m.—NJ Medical School,
24 Newark
31 *(CMDNJ and AMNJ)*

4 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

4 **Tumor Conferences**
11 11 a.m.-12 noon—Morristown
18 Memorial Hospital
25 *(Morristown Memorial Hospital and AMNJ)*

18 **Abdominal Aortic Aneurysms**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

21 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

25 **Endotracheal Tubes and Tracheal Injuries**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

SURGICAL SPECIALTIES (inclues FNT, Neurosurgery, Ophthalmology, Orthopedic, Plastic, and Vascular Surgery.)

Feb.

26 **Current Status of Cardiac Surgery**
8-10 p.m.—Englewood Hospital
(Englewood Surgical Society and AMNJ)

Mar.

5 **Vascular Surgery**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

Fifth Annual Orthopaedic Symposium
21 12 noon-4:30 p.m.
22 8 a.m.-4:30 p.m.—Rutgers Medical School, Piscataway
(NJ Orthopaedic Society and AMNJ)

MISCELLANEOUS

Feb.

7 **Developmental Biology**
14 4-6 p.m.—Institute for Medical
21 Research, Copeland St., Camden
28 *(Institute for Medical Research and (AMNJ)*

Mar.

Quality Assurance/Risk Management
5 8:30 a.m.-4 p.m.—Governor Morris Inn, Morristown
7 8:30 a.m.-4 p.m.—Cherry Hill Inn
(NJ Foundation for Health Care Evaluation and AMNJ)

6 **Developmental Biology**
13 4-6 p.m.—Institute for Medical
20 Research, Copewood Street, Camden
27 *(Institute for Medical Research and AMNJ)*

29 **11th Annual Seminar—Sports Medicine**
Valley Hospital, Ridgewood
(The Valley Hospital)

OBITUARIES

Dr. Pasquale Amato

A family practitioner from Newark and member of our Essex County component, Pasquale Amato, M.D., died at his home on October 23, 1979. Born in 1917 and graduated from the University of Bologna (Italy) Medical College in 1953, Dr. Amato returned to New Jersey to establish a general practice in Essex County. He was affiliated with St. James Hospital in Newark and was a Fellow of the American Academy of Family Practitioners.

Dr. John A. Botti

A senior member of our Hudson County component, John A. Botti, M.D., died on November 4, 1979. A native of New Jersey, born in 1893, Dr. Botti was graduated from Fordham Medical School, class of 1916, and, after practicing general medicine in Jersey City for a short time, pursued a career in ophthalmology and otolaryngology. He had been chief of ophthalmology and otolaryngology at St. Francis Hospital in Jersey City, and was on the staff at the Jersey City Medical Center and the Fairmount Hospital, also in Jersey City. He was a Fellow of the American College of Chest Physicians. In 1966, Dr. Botti was a recipient of MSNJ's Golden Merit Award, indicating 50 years of medical practice. He retired from practice in 1970 but remained active as a consultant for several years longer.

Dr. Joseph Colonna

Joseph Colonna, M.D., a member of our Hudson County component and treasurer of the Board of Governors of Riverside Hospital in Secaucus, died suddenly last November 4 in Pascack Valley Hospital, Westwood. Born in 1918, Dr. Colonna was graduated from St. Louis University Medical School, class of 1943. During World War II, he served with the medical department of the AUS and in 1947 returned to West New York to establish a practice in general surgery, later moving his offices to Union City. In addition to the Riverside facility, of which he was one of the founders, Dr. Colonna was affiliated with St. Mary's Hospital in Hoboken. He retired from active practice in 1978.

Dr. Charles H. Flax

One of Essex County's senior members, Charles H. Flax, M.D., of Newark, died on November 26 at Beth Israel Medical Center there. A graduate of the University of Zurich, Switzerland, in 1936, Dr. Flax took graduate training at Cook County Hospital (NY), New York Postgraduate Hospital, and Newark Beth Israel Medical Center, and practiced obstetrics and gynecology in Newark for 42 years. He had been on the faculty of the College of Medicine and Dentistry of New Jersey and was a Fellow of the American College of Obstetrics and Gynecology and of the International College of Surgeons. Dr. Flax was on the staff at Newark Beth Israel Medical Center, St. James Hospital in Newark, and the St. Barnabas Medical Center in Livingston. Dr. Flax was 80 years old at the time of his death.

Dr. George T. Hoffmann

The former chief of the medical staff at the Riverside Hospital in Red Bank, George T. Hoffmann, M.D., died at the hospital on November 21, 1979. Born in 1918 and graduated from Harvard Medical College in 1943, Dr. Hoffmann pursued a career in pathology and was board certified in that specialty. Following service with the United States Navy during World War II, Dr. Hoffmann was affiliated with St. Vincent's Hospital in New York as staff pathologist. He came to Riverview Hospital in 1956. He was founder and medical director of the Monmouth County Blood Bank, now known as the Central New Jersey Blood Bank. Dr. Hoffmann was active in civic affairs and had served several terms on the Rumson-Fair Haven Regional High School Board of Education.

Dr. Ernest Kyle

At the grand age of 85, Ernest Kyle, M.D., who practiced medicine in the Plainfield area for 40 years, died at Point Pleasant Hospital on October 28, 1979. He was a graduate of Harvard Medical School, class of 1925. Before retirement, Dr. Kyle had been on the staff at the Muhlenberg Hospital in Plainfield. In 1975 he was honored as one of the recipients of MSNJ's Golden Merit Award indicating 50 years of medical practice. Currently Dr. Kyle was living in Normandy Beach, New Jersey.

Dr. Martin E. Lasoff

On November 16, 1979, Martin E. Lasoff, M.D., a member from Morris County, died in Morristown Memorial Hospital where he had been director of physical medicine and rehabilitation. Born in 1912, Dr. Lasoff was graduated from Middlesex University Medical School (Massachusetts) in 1941 and took a residency at New York University Medical Center Institute of Physical Medicine and Rehabilitation. He had practiced in Brooklyn and Bayside and came to New Jersey in 1963, when he joined the staff at the Morristown Memorial Hospital (from which he retired in 1977), and transferred his membership from the New York State Society to MSNJ. He was a member of the American Congress of Physical Medicine and Rehabilitation and Vice-President of the New Jersey Society of Physical Medicine and Rehabilitation. Dr. Lasoff was adjunct professor of paramedical sciences at Fairleigh Dickinson University, and clinical assistant professor of rehabilitation medicine at New York University Medical Center. He also was clinical assistant professor of physical medicine and rehabilitation at New Jersey Medical School, CMDNJ.

Dr. Vincent Napoliello

Vincent Napoliello, M.D., of Spring Lake, a member of our Essex County component, died on November 12, 1979, at his home. A graduate of the University of Minnesota School of Medicine in 1921, Dr. Napoliello practiced general medicine in Newark until retirement in 1975. He had been affiliated with the St. James Hospital in Newark and the Jersey City Medical Center. In 1971, Dr. Napoliello was a recipient of MSNJ's Golden Merit Award indicating 50 years of medical practice. He was 85 years old at the time of his death.

Dr. John L. Olpp

A well-known member of our Bergen County component and long a Judicial Councilor from his district to the State Society's Judicial Council, John L. Olpp, M.D., of Englewood, died on November 7, 1979. Born in Bethlehem, Pennsylvania in 1907 and graduated from Columbia University's College of Physicians and Surgeons, Dr. Olpp pursued a career in radiology and was board certified in that specialty. He had been affiliated with the Englewood Hospital and was a Fellow of the American College of Radiology and member of the American Roentgen Ray Society and the Radiological Society of North America. Dr. Olpp was active in other areas of organized medicine and for many years was a member of MSNJ's Committee on Cancer Control.

Dr. Sydnor Penick

At the untimely age of 47, Sydnor Penick, III, M.D., a member of our Mercer County component and associate professor of internal medicine and psychiatry at Rutgers Medical School, died last November 11 at his home in Princeton. A native of New Jersey, Dr. Penick was graduated from Harvard Medical College, class of 1958, and pursued a residency in medicine at New York Hospital. He was board certified in both internal medicine and psychiatry and was author of numerous research articles in the fields of obesity, alcoholism, drug addiction and behavior modification. He maintained a private practice in Princeton and was chairman of the Health Advisory Council of Princeton University, from which institution he had received his bachelor of arts degree in 1954.

Dr. Edward D. Quinn

A senior member of our Essex County component, Edward D. Quinn, M.D., died on November 17, 1979. Born in 1911 and graduated from Columbia University's College of Physicians and Surgeons, Dr. Quinn was a family practitioner in Bloomfield. He was a member of the American Academy of Family Practitioners and had been affiliated with Mountainside, Community, and St. Vincent's Hospitals in Montlcair.

Dr. John Wagner

We have just learned of the death of John Wagner, M.D., an emeritus member of our Essex County component, on September 18, 1979. A native of Russia, born in 1890, Dr. Wagner, long retired, had practiced medicine in Newark for many years. He was a graduate of the Medical University of Vienna in 1918. Dr. Wagner was living in West Palm Beach, Florida at the time of his death.

Looking to the future in healthcare cost containment

We're sharing our knowledge of healthcare economics with senior medical students at the College of Medicine as part of our cost containment program.

Future physicians must understand the full implications of the costs of the patient care they order.

We've had two seminars thus far, and plan one more so that all members of the class of '80 will have participated in the program. At each, with the college's department of Primary Healthcare Education, we have tried to show the students how to provide good medical care without increasing the cost unnecessarily.

We'd like to remind you that we have a film dealing with the same subject which is available free to your county societies through our professional relations department. Just call (201) 456-3250 to schedule a showing of the film "The Buck Starts Here."

All of us must work together to help contain healthcare costs.



Blue Shield
of New Jersey

BOOK REVIEWS

Alcohol and the Diet

Daphne A. Roe, M.D. Westport, CT, AVI Publishing Co., 1979. Pp 229. Illus. $15)

This book considers the effects of alcoholic beverages and diet on alcoholism with emphasis on interrelationships between alcohol and nutrients. After an introductory chapter on the history of alcohol as a beverage, medicine and food, the author, who is Professor of Nutrition at Cornell University, Ithaca, New York, reviews the effects of alcohol on appetite, its absorption and metabolism, and the eating habits of social drinkers and alcoholics. A chapter on alcohol consumption and body weight deals with body build, weight gain and weight loss in drinkers. Fetal dysmaturity and the fetal alcohol syndrome in the offspring of drinking mothers are well described. Other chapters consider the effects of alcohol on nutrient availability and nutritional status.

The chapter on nutritional assessment contains useful tables on caloric and nutrient content of common foods and recommended daily dietary allowances for infants, children, men and women, as well as tables showing clinical signs of nutrient, vitamin and mineral deficiencies in alcoholics, and of biochemical tests for nutritional status. Dr. Roe's treatment of nutritional rehabilitation of alcoholics describes management in acute care, in surgery and in the chronic phase of the illness. Acute metabolic crises and alcoholic liver disease also are considered from the nutritional point of view. This chapter also contains suggestions for the use of food behavior modification in the treatment of alcoholics.

The final chapter deals with the constituents of alcoholic beverages and medications including a useful table on calorie, mineral and vitamin content of beer, wines and liquor, and another with the constituents of alcohol-containing medications. The interactions of alcohol with natural food toxins, the monoaminoxidase inhibitor reaction, the disulfiram reaction and allergic reactions to quinine and other chemical additives also are considered here.

The book is remarkably up-to-date, documenting all relevant references up to 1978. At a time when a book with this title might be expected to provide either a quack cure for alcoholism through natural foods and vitamins, or a treatise on how to avoid weight gain when drinking, it is encouraging to find a thoroughly scientific work by a physician who is expert in the medical complications of alcohol abuse and in all the complex nutritional aspects of alcoholism. It is recommended to all physicians who have alcoholic patients. It should be in every hospital library.

A. Arthur Sugerman, M.D.

Acknowledgments

The Journal acknowledges the contribution of the members of the Manuscript Review Board (whose names are listed on the title page of each issue) for their assistance in evaluating scientific manuscripts during the year past, and wishes to thank the following, whose reviews of books sent to *The Journal* were published during 1979 (Volume 76).

Arthur Bernstein, M.D.
Victor H. Boogdanian, M.D.
Julio delCastillo, M.D.
David Eckstein, M.D.
Damon M. Fellman, M.D.
Stanley S. Fieber, M.D.
Hyman W. Fisher, M.D.
Avrum L. Katcher, M.D.
Peter J. Koblenzer, M.D.
Arthur Krosnick, M.D.
Seymour F. Kuvin, M.D.
Henry R. Liss, M.D.
Barry A. Maltzman, M.D.
Marco Antonio Pelosi, M.D.
Harry M. Poppick, M.D.
Fred B. Rogers, M.D.
Edwin L. Rothfeld, M.D.
Manuel J. Rowen, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Werner Steinberg, M.D.
Raymond B. Strauss, M.D.
A. Arthur Sugerman, M.D.
Samuel W. Warburton, M.D.
J. Henry White, M.D.

THE JOURNAL of The Medical Society of NEW JERSEY

Rate Card effective January 1980

General Information

1. Issuance:

a. Frequency: Monthly

b. Issue date: 10th of month.

c. Mailing date: 10th of month.

2. Established: 1904

3. Organization Affiliation:

Official publication of
The Medical Society of New Jersey.

4. Circulation Data:

a. Controlled circulation to all members of the Medical Society of New Jersey. Members' subscription ($5) is included in Society dues. Rates for nonmembers $10, outside USA add $4.00 for postage. Single copies $1.

b. Annual percentage of subscription renewals: 100% of members.

c. Number of issues sent after subscription expiration: None.

5. Special Issues: Convention
Annual Transactions
Index (December)

6. Editorial Content: Original scientific articles, special articles, case reports, editorials, medical news and meeting notices, trustees' minutes, communicable disease reports, state legislation, convention, medical insurance, PSRO, education, CME, etc.

7. Requirements for Acceptance of New Professional Products for Advertising.

All advertising subject to Publication Committee approval.

8. Requirement for Advertising Clearance:

All advertising subject to Publication Committee approval.

9. Advertising Acceptance of Nonprofessional Products or Services:

All advertising subject to Publication Committee approval

10. Policy on Placement of Advertising:

Advertising is interspersed throughout the publication. All R.O.B. ads are rotated each month. Advertising and editorial material is not placed on the same page.

11. Advertisers' Index: No.

12. Services to Advertisers:

Availability of editorial reprints: Please direct such requests to the Editor.

13. Staff

Editor: Arthur Krosnick, M.D.; Managing Editor: Marjorie D. Treptow; Executive Director: Vincent A. Maressa.

14. Circulation:

All members of the Medical Society of New Jersey.

15. Guaranteed Circulation:

All members of the Medical Society of New Jersey.

16. Circulation Verification:

Publisher's statement, postal receipt verification.

17. Rates Per Thousand:

Based on the 12-times rate of $295 and circulation of 10,000: $29.50.

18. Coverage and Market

a. Coverage: All members of The Medical Society of New Jersey, plus trade circulation. Circulation figures as of 6-1-79.

b.

GP	2,790
IM	1,597
GS	1,222
OBG	693
PED	582
DERM	170
ALL	68
UROL	181
OTO	368
PSYCH	547
OPH	322
CARD	78
GASTRO	28
ANES	234
TOTAL	9,687

c. Trade Circulation: 650

19. MEMBERSHIP CIRCULATION BY COUNTIES OF STATE OF NEW JERSEY

Atlantic	245
Bergen	1,152
Burlington	278
Camden	575
Cape May	53
Cumberland	140
Essex	1,828
Gloucester	116
Hudson	585
Hunterdon	79
Mercer	592
Middlesex	573
Monmouth	583
Morris	531
Ocean	260
Passaic	760
Salem	51
Somerset	180
Sussex	73
Union	850
Warren	69
Total	9,573

Guaranteed Circulation: 10,000

THE JOURNAL of The Medical Society of NEW JERSEY Rate Card Effective January 1980

ıtes

Issuance:

Frequency: Monthly

Issue Date: 10th of month

Mailing date: 10th of month.

Closing Dates for Space:

Reservations: 1st of month preceding month of issue

Cancellations: 6th of month preceding month of issue

Agency Commission: 15%

Cash Discount: 2%, 10 days.

Rates:

	1 time	3 times	6 times	12 times
age	335	325	315	295
page	180	170	160	150
page	90	85	80	75
page	55	50	45	40

Classified: Available to member physicians only.

Earned Rates:

tes based on number of insertions used within one r, regardless of size. Space purchased by a parent npany and subsidiaries is combined for accounting earned rates.

Color Rates:

Standard color $120 plus earned black and white e.

List of standard colors: AAAA standard red, en, blue, yellow, orange.

Matched Colors: $130 plus earned black and ite rate.

3-color rate: $390 plus earned black and white e.

4-color rate: $440 plus earned black and white e.

ecial 4-color rates are available to advertisers cing insertions in the Five Key State Journals inois, New Jersey, New York, Ohio and Pennsylnia). Contact UMA.

Bleed: 10%

Inserts:

pound coated only.

Preferred Position Rates:

Preferred position rates quoted on request and ject to availability.

Should an advertiser insist on a specific position, duction requirements may dictate premium rates.

30. Miscellaneous:

a. Contract requirements: All contracts subject to publisher's approval.

b. Statement of guarantee of uniform rates and discounts to all advertisers using same amount and kind of space: No exceptions to published rates.

c. Concessions: None

d. Rates subject to change with 90 days notice. Contracts accepted with understanding that rates will be guaranteed for three months beyond last issue closed. In the event of rate increase, contracts may be terminated without penalty of short rate.

Mechanical Requirements

THE JOURNAL is printed by offset.
Trim size: 8 x 11

31. Plate Sizes:

Page Unit	Dimensions
1 full page	7 x 10
1/2 horizontal	7 x 4-7/8
1/2 vertical	3-3/8 x 10
1/4 vertical	3-3/8 x 4-7/8
1/8 vertical	3-3/8 x 2-3/8

32. Bleed Sizes:

Page Unit	Dimensions
1 full page	8-1/8 x 11-1/4
1/2 horizontal	8-1/8 x 5-5/8
1/2 vertical	11-1/4 x 4-1/16

33. Insert Requirements:

Untrimmed size—8-1/4 x 11-1/4
Quantity—11,500

34. Paper Stock: Covers: 80-pound.
Inside pages: 45 or 50 pound.

35. Type of Binding: Perfect bound.

36. Halftone Screen: Up to 133 screen.

37. Reproduction Requirements:

Black and white positives and 2-color advertisements: negatives, camera-ready mechanicals, and art work acceptable.

4-color: film negatives or positive separations and press proof.

Offset film negatives or positives on .002 or .004 stable base materials must have register marks, center marks, and trim marks clearly indicated. Each negative must be marked for color and be right reading emulsion side down.

NEEDED

Neonatologist or Pediatrician with strong nursery experience. Part time in South Jersey hospital. Call Dr. E. Brown (609) 963-8830 ext. 375.

FOR SALE

BRIDGEWATER

Professional office, residence, corner location, 1.42 acres. Custom built contemporary ranch, 3 bedrooms, 2½ baths, familyroom with fireplace. Gas heat, air-conditioning, separate system for office. Owner retiring, Tel. (201) 722-2909

Ocean County
(Five miles south of Toms River)

THE SOLARIUM



Renting 704 square feet

Present Occupants: General Dentist
Internal Medicine

NEW PROFESSIONAL BUILDING	GROUND LEVEL
FOYER WITH SKYLIGHTS & PLANTS	CENTRAL AIR
CUSTOM LAYOUT	CARPETING
HOSPITAL PRIVILEGES	AMPLE PARKING

For more information
Call 269-3200

MEDICAL DIRECTOR

Position of Chief of Medical Department and Director of Medical School Affiliated Medical Residency Program in approximately 400 bed general, non-profit hospital. Available July 1 or sooner. Active teaching program with multiple sub-specialty divisions in the department. Salary commensurate with qualifications. Apply to:

Medical Department Search Committee
c/o Mr. William T. Payne, Jr.
Administrator
Helene Fuld Medical Center
750 Brunswick Ave.
Trenton, N.J. 08638

PHYSICIANS NEEDED

Ringwood (Bergen/Passaic County border) needs a Family Practitioner, an Internist, an Obstetrician, a Gynecologist, a Pediatrician and others.

Ringwood Professional Plaza, a Condominium will be ready for occupancy in June/July 1980.

Purchase, Lease/Purchase or Lease a suite or office. Up to 100% financing available to qualified Purchasers.

IDEAL FOR A NEW PRACTICE

For details please contact:
Ken Gluckman
Ringwood Professional Plaza
72 Hickory Road
Ringwood, New Jersey 07456
(201) 962-6300

Picture yourself as an Air Force Physician

Consider an excellent income without overhead cost or red tape. Thirty days of paid vacation each year. Associates to care for your patients while you're away. Continued professional education. An income that continues if you're ill. Medical care for yourself and your family. And, if you qualify, a lifetime retirement income equivalent to half your base salary after only 20 years of active duty.

Additionally, well-equipped and well-staffed hospitals and clinics provide an excellent environment for your profession. And we know that's important to you.

Put yourself in the picture of good health care in the Air Force Medical Service.

For more information, contact:

Northern NJ
Capt. Richard T. Chamberlain
USAF Medical Recruiting
376 Hamburg Turnpike
Wayne, NJ 07470

Southern NJ
Capt. Marty Csercsevits
USAF Medical Recruiting
2201 Rt. 38, Suite 730
Cherry Hill, NJ 08002

Air Force. A great way of life.

CLASSIFIED ADVERTISEMENTS

OB/GYN—Board eligible. Available July 1980. Seeks multi or single specialty group or partnership. Has N.J. License. Write Box No. 164, c/o THE JOURNAL.

OPHTHALMOLOGIST—Terminating residency, June 1980, Wills Eye Hospital, Philadelphia. Desires to purchase Eye Practice or association with established office in New Jersey, preferably Bergen County. Dr. Aimette, P.O. Box 115, Bogota, N.J. 07603.

UROLOGIST—Will consider all types of practice. Well trained at major N.Y.C., university center. Available July 1980. G. Rosenberg, M.D., 205 W. 15th Street, New York City, N.Y. 10011.

EMERGENCY ROOM PHYSICIAN—Full or Part time. Central New Jersey. Academically oriented. Modern facility. Financially rewarding. E.V. McGinley, M.D. (201) 277-0441.

PATHOLOGIST—PA-CP Associate with administration ability. Strong interest in CP lab. Hospital with well equipped CP lab in South Jersey, 240 beds. Teaching appointment may be available. Send cv and date of availability to Box No. 163, c/o THE JOURNAL.

PEDIATRICIAN—Board eligible/certified to join established practice in Bergen County in July, 1980. Excellent opportunity. Write Box No. 175, c/o THE JOURNAL.

PHYSICIAN—Pediatrician preferred. Excellent opportunity for independent wanting to build a fast, successful practice. For information, please call (201) 536-3732.

OFFICE/HOME—FOR SALE—Livingston, N.J. Six room medical office with x-ray. Attached to 5 bedroom, 3-1/2 bath, deluxe home with exceptional features. Prime residential location, 3 minutes from St. Barnabas. W.I. Weiss, M.D., (201) 992-4171.

OFFICE/HOME—FOR SALE—Union County—Elegant, modern, split level home—office with private entrances in affluent area. Equipped office with x-ray. High net Family Practice chiefly Internal Medicine. Retiring. Near seashore, New York City. Good schools. Hospital 10 minutes. Write Box No. 172, c/o THE JOURNAL.

NEEDED—OFFICE SPACE—Psychiatrist needs part-time office space. One-two days a week. Prefer Union, Middlesex or Somerset Counties, Dr. H.W. Schein (201) 240-5655.

PEDIATRIC OFFICE—Part or full time work with flexible hours, Jersey Shore area. 1-1/2 hours to New York or Philadelphia. Write Box No. 174, c/o THE JOURNAL.

OFFICE SPACE TO SHARE—Bergen County. Fully equipped for elective surgery with operating and recovery. Ideal for Eye, ENT, Plastic. In Fort Lee. Convenient to all northern Jersey, New York, Westchester and Long Island. Modern skyscraper, private entrance, parking. Will subdivide to suit. Write Box No. 176, c/o THE JOURNAL.

OFFICE SPACE TO SHARE—East Brunswick. Doctor of Internal Medicine looking to share present space with OB/GYN, General Surgeon, Pediatrician or Orthopedic Surgeon. Office is centrally located to all nearby area hospitals. Only available doctors need apply. Send resume. c/o S. Gresh, 1 Racetrack Road, Bldg. #2, East Brunswick, N.J. 08616.

OFFICE SPACE—For Rent, medical office space, new and fully equipped, part/full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE—Available in new building. 750 square feet, excellent location and opportunity for physician. Available February. Call (201) 652-5499.

OFFICE SPACE—Hunterdon County. For family practitioner(s) in modern professional building in growing suburban community. 5 rooms $370; 7 rooms $475. Write R.D. #1 Box 247 Milford, New Jersey 08848. (201) 995-2365.

OFFICE SPACE—Moorestown, N.J. Renting custom medical offices built to suit. Solar Heated Medical Building near Route 38 and 295 and Philadelphia. (609) 235-2651.

OFFICE SPACE—Professional Office For Lease. Near hospital, five rooms. Morris County, N.J. (201) 366-2557.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

NEWARK BETH ISRAEL MEDICAL CENTER announces . . .

. . . the opening of new facilities for

PEDIATRIC INTENSIVE CARE

and

PEDIATRIC CARDIOLOGY

This unit will provide care for all types of Pediatric critical and cardiovascular problems. There is a full time director and ICU nursing staff with isolation and parenteral hyperalimentation abilities. Transport of patients by a doctor and nurse will be provided upon request. Capabilities include respirator assistance, continuous CVP and blood pressure monitoring, continuous ECG and respiratory rate monitoring and dialysis.

PEDIATRIC CARDIOVASCULAR EVALUATION on outpatient or inpatient basis including echocardiography, EKG stress testing and holter monitoring will be available by Pediatric Cardiologist.

SUPPORTING SERVICES include:

- Pediatric Surgery
- Pediatric Neurosurgery
- Pediatric Toxicology
- Pediatric Nephrology
- Neonatology
- Pediatric Hematology and Oncology
- Pediatric Infectious Disease
- Adolescent Medicine
- Pediatric Allergy
- Developmental Medicine
- 24-hour Radiology
- 24-hour Laboratory Services
- Telephone consults for Pediatric Cardiology or Pediatric Critical Care available

Newark Beth Israel Medical Center

201 Lyons Avenue at Osborne Terrace, Newark, New Jersey 07112



The Library
Acquisitions Division
Univ. of Calif. San Francisco

LIBRARY
U.C. SAN FRANCISCO
FEB 28 1980

February 1980

Journal of the Medical Society of New Jersey

Perforation of Gallbladder
G. J. Paul, M.D.

Drinking and Pregnancy
M. A. Pelosi, M.D., et al.

Indications for ERCP
M. B. Kerner, M.D.
J. D. Levinson, M.D.

Cambodia
Hon. Millicent Fenwick

Complete Table of Contents on Page 84

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

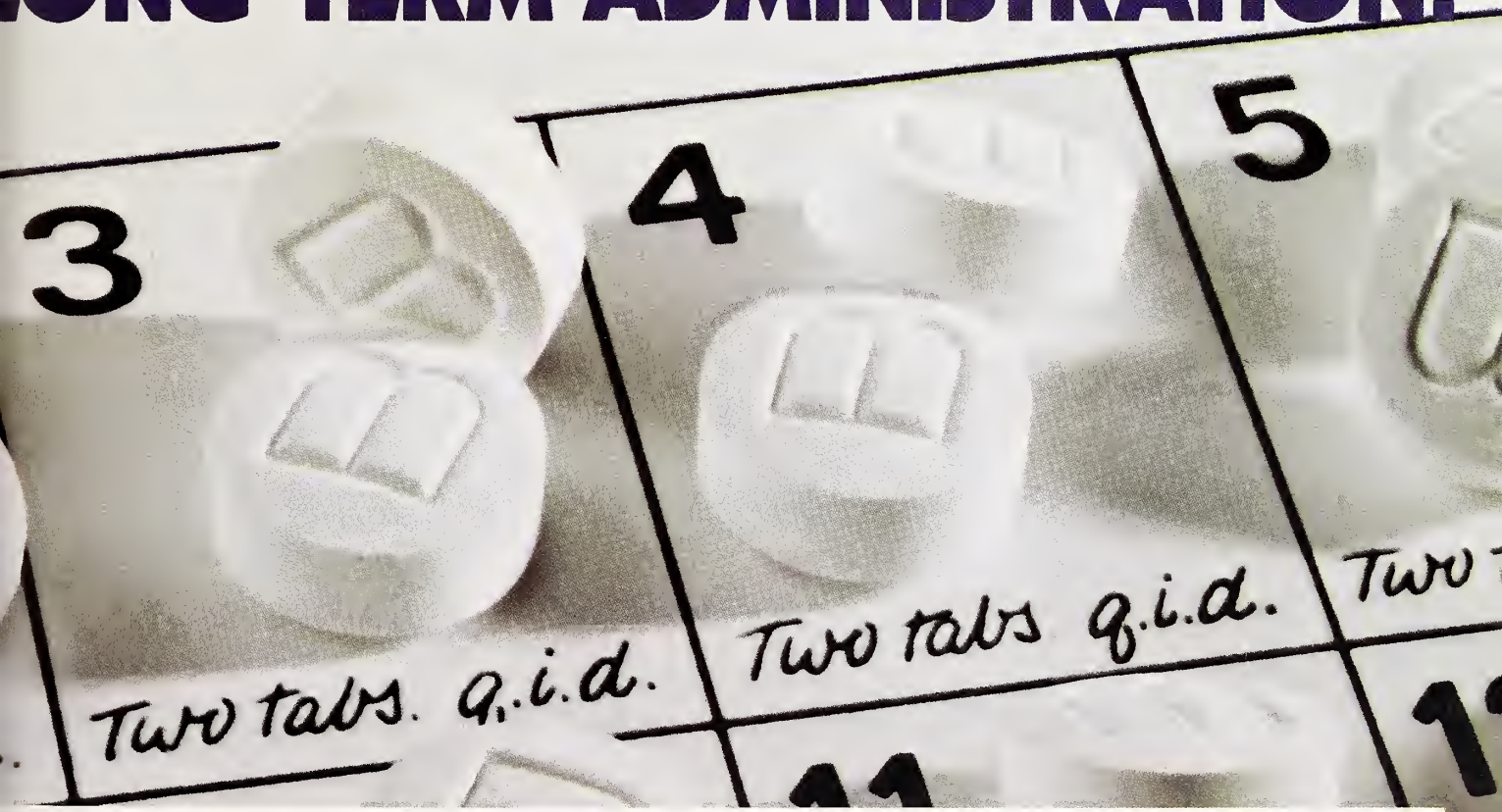
Address: _____

Tel. No. _____

Best Time To Call _____

Are you prescribing a regimen of PLAIN ASPIRIN EVERY DAY?

BUFFERIN® WAS SIGNIFICANTLY BETTER TOLERATED IN LONG-TERM ADMINISTRATION.





In a particular series of 14-day gastric tolerance studies among 182 normal subjects, 49% suffered G.I. upset from plain aspirin. Most of these subjects took BUFFERIN without discomfort.

Subjects in these controlled trials, which utilized a crossover design, were given Bufferin and Bayer® Aspirin for two weeks each in a balanced order of administration. The cumulative gastric tolerance superiority of Bufferin over plain aspirin was significant ($P = <.01$) from day one and persisting through each day of the study. This superiority for an extended period could be of particular importance to patients on repeat-dosage schedules.

For full aspirin benefits, together with excellent gastric tolerance, Bufferin should be your brand of choice. If you are prescribing a regimented daily dose of aspirin, prescribe Bufferin—the repeat-dosage aspirin—instead.

BUFFERIN: The Repeat-Dosage Aspirin.

For complimentary samples of Bufferin and Arthritis Strength Bufferin, please write: Bufferin, P.O. Box 65, Elizabeth, New Jersey 07207.
Composition: Each Bufferin tablet contains aspirin 324 mg. and the antacid Di-Alminate® (Bristol-Myers' brand of Aluminum Glycinate 48.6 mg. and Magnesium Carbonate 97.2 mg.).

©1978, Bristol-Myers Co.

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
PRESIDENT-ELECT
Augustus L. Baker, Jr., M.D. (Morris) Dover
FIRST VICE-PRESIDENT
Armando F. Goracci, M.D. (Gloucester) Woodbury
SECOND VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
IMMEDIATE PAST-PRESIDENT
Charles S. Krueger, M.D. (Burlington) Mount Holly
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
James S. Todd, M.D. (1980) (Bergen) Ridgewood
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Palma E. Formica, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1980) (Cumberland) Bridgeton
William Greifinger, M.D. (1981) (Essex) Belleville
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Alexander Kovacs, M.D. (1981) (Union) Scotch Plains
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1980) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Vacancy
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1980) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1980) Haddonfield
Karl T. Franzoni, M.D. (1980) Trenton
Henry J. Mineur, M.D. (1980) Cranford
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

February 1980

Publication Committee

John F. Marshall, M.D., *Chairman*
Julio C. del Castillo, M.D.
Paul J. Hirsch, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Donald S. Kwalick, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 908. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies $1. Address communications to *The Journal,* MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500.
Hydergine sublingual tablets 1 mg, containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

February 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

Volume 77
Number 2

Pages 81-152

90 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

93 A New Feature

93 Technology Assessment

94 You Were Wrong, Robert Frost

ORIGINAL ARTICLES

97 Perforation of the Gallbladder
George J. Paul, M.D., Trenton

101 Drinking and Pregnancy
M. A. Pelosi, M.D.; A. Langer, M.D.; J. Apuzzio, M.D.; H. A. Kaminetzky, M.D.; D. Fricchione, M.D., Newark

STATE OF THE ART

105 Indications for Endoscopic Retrograde Cholangiopancreatography (ERCP)
M. B. Kerner, M.D.; J. D. Levinson, M.D., Springfield

CASE REPORTS

111 Pericardial Tamponade in Rheumatoid Arthritis
M. P. R. Nathan, M.D.; H. Rubenstein, M.D.; P. B. Rao, M.D.; M. Sanders, M.D., Jersey City

113 Fetal Hemoglobin and Sickle Hemoglobin in 85-Year-Old Man
M. Shanmugathasa, M.D.; S. Trubowitz, M.D., East Orange

115 Solitary Neurofibroma of Rib
S. D. Gisser, M.D.; E. G. Moss, M.D., Camden

118 Infectious Hepatitis and the Guillain-Barré Syndrome
M. J. Partnow, M.D., Willingboro; M. W. Devereaux, M.D., Cleveland; T. J. Humphries, M.D., Philadelphia

121 "Chronic" Dermatomyositis: Response to Corticosteroids
Lonnie B. Hanauer, M.D., Millburn

CLINICAL NOTE

124 Auto-Cholecystogram Emphysematous Cholecystitis
D. Rothman, M.D.; J. A. Parrella, M.D., Red Bank

THE ELECTROCARDIOGRAM

125 Nonparoxysmal Junctional Tachycardia
Edwin L. Rothfeld, M.D., Newark

NUTRITION UPDATE

127 Lactase Deficiency
A. D. Newcomer, M.D., Rochester, Minn.

YOUR CONGRESSMAN SPEAKS

129 Cambodia
The Honorable Millicent Fenwick, Washington, D.C.

123 **ANNUAL MEETING HOUSING APPLICATION**

130 **HELP FOR IMPAIRED PHYSICIANS**

DOCTORS' NOTEBOOK

131 Trustees' Minutes: December 16, 1979

132 New Jersey Law—Scoliosis School Screening

133 Report from the Foundation

133 CMDNJ Notes

134 Physicians Seeking Location in New Jersey

140 **PERSONAL ITEMS**

141 **CME CALENDAR**

145 **OBITUARIES**

147 **BOOK REVIEWS**

Cover

The cover photograph, entitled "Detail of Water," taken in the fall of 1979 at Worthington State Forest (Warren County), was provided by John L. Krause, Jr., M.D., a member of our Camden County component, who has supplied covers for *The Journal* in the past—most recently for the October 1979 issue.

Note Dates and Location →

214th Annual Meeting
May 10-13, 1980
Meadowlands Hilton, Secaucus

They may not look tough now!



But you should have seen them at the National Wheelchair Games!

The competition was fierce at the National Wheelchair Games at St. John's University this past summer. There were 371 athletes — all survivors of 2,000 previous wheelchair tournaments in 45 states — and when the games were over, our seven NJR Wheelers had competed in 24 events and won six medals. Doug Heir (front row left) won a silver and a bronze; Janet Severt won a gold and three silver; Gil Diaz competed in the greatest number of events — five.

Win, lose, or draw, all of the NJR Wheelers were outstanding, and our physicians, therapists, nurses, and other rehabilitation specialists are proud of them. We're also proud of coaches Beverly Epstein, John Betterbed, and Donna Singer, director of wheelchair athletics at NJR. Like our athletes, they're a lot tougher than they look.



New Jersey Rehabilitation Hospital

240 Central Avenue East Orange, NJ 07018 • 201-673-1860

Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics, Inc.

Information for Readers and Contributors

The Journal, the official organ of the Medical Society of New Jersey is published monthly under the direction of the Committee on Publication. Released the first week of the month, a copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles*, based on research, original concepts relative to epidemiology of disease, and treatment methodology; *case reports*, based on unusual clinical experiences; *review articles; clinical notes*, succinct items on some aspect or new observation or technique of a case experience; and *special articles*, which may include evaluations, policy and position papers, and reviews of non-scientific subjects. Material submitted here is for exclusive publication in *The Journal*. Upon request of the author, the Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal*. The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal, MSNJ.*"

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten double-spaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editors. Authors must understand that the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data or special photographs).

Tables and Illustrations—Tables must be typewritten, double-spaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page—The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References, which should not exceed 35 citations except in review articles, should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed double-spaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus*.

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis*. New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Manuscript Review Board, who render an opinion to the Editor. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar may not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal*, MSNJ, 2 Princess Rd., Lawrenceville, N.J. 08648.

Are You Familiar with Blue Shield's New Series 14/20 Fee Program?

It's our HIGHEST-PAYMENT fixed fee program – the fees are 40 percent higher than the Series 750. And, you'll find more and more of your patients have enrolled in this new and better program – enrollment increased more than 400 percent in 1979.

Compare these fees:

	Series 500	Series 750	**Series 14/20**
Appendectomy	$184	$263	**$368**
Cholecystectomy	263	375	**525**
Vaginal Delivery	210	300	**420**
In-hospital Medical Visit Initial Day	23	33	**46**
Subsequent Days	7	10	**14**
Comprehensive Consultation	32	45	**63**

If you'd like more information on the Series 14/20 program, call our Professional relations department at **(201) 456-3250.**



Blue Shield of New Jersey

Then...

You'll feel better in a few months, Madame. Morning sickness usually disappears after a while.

Now...

I'm glad you're feeling so well, Linda. I want you to continue the same medication.



Bendectin®



Each tablet contains doxylamine succinate 10 mg. pyridoxine hydrochloride 10 mg.

Trusted alternative to the nausea and vomiting of pregnancy

Confidence begins with

Bendectin

You can prescribe Bendectin with confidence because

- The convenient nighttime dosage is taken when queasy stomach is less likely to be present.

- The special coating permits the nighttime dose to be effective in the morning hours—when she needs it most.

Your patient can take Bendectin with confidence because

- Several epidemiological studies have shown that the incidence of birth defects in the offspring of women who received Bendectin during pregnancy was no higher than in the offspring of women who did not receive the drug during pregnancy.

- Like all drugs considered for use during pregnancy, particularly during the first trimester, Bendectin should be used only when clearly needed.

When morning sickness is a real problem Bendectin is an effective solution

The only product formulated exclusively for morning sickness.

Merrell

MNQ-128

9-5372 (Y326B)

Bendectin®

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION
Nausea and vomiting of pregnancy.

PRECAUTIONS
Because of potential drowsiness, Bendectin should be prescribed with caution for patients who must drive automobiles or operate machinery.

Studies in rats and rabbits have revealed no suggestion of drug-induced fetal abnormalities at doses of Bendectin up to 90 times the maximum human dose. In addition, several epidemiologic studies in women who received Bendectin during pregnancy have shown that the incidence of birth defects in their offspring is no higher than in women not taking the drug during pregnancy. Nevertheless, like all drugs considered for use during pregnancy, particularly during the first trimester, Bendectin should be used only when clearly needed.

ADVERSE REACTIONS
The adverse reactions that may occur are those of the individual ingredients. Doxylamine succinate may cause drowsiness, vertigo, nervousness, epigastric pain, headache, palpitation, diarrhea, disorientation, or irritability.

Pyridoxine hydrochloride is a vitamin that is generally recognized as having no adverse effects.

DOSAGE AND ADMINISTRATION
2 Bendectin tablets at bedtime. In severe cases or when nausea occurs during the day: 1 additional Bendectin tablet in the morning and another in midafternoon.

Product Information as of January, 1978

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

Featuring: Medical Injuries, Negligent Conduct, and Medical Malpractice Claims: Fundamental Distinctions MIEENJ Peer Review Program Results

MEDICAL INJURIES, NEGLIGENT CONDUCT, AND MEDICAL MALPRACTICE CLAIMS: SOME FUNDAMENTAL DISTINCTIONS**

There are vastly important differences between an *injury* that a patient may suffer in the course of medical or surgical treatment; an injury that is caused by *negligence* (which is malpractice); and a malpractice *claim,* which is an allegation, with or without foundation in fact, that an injury was caused by negligence. Practically all discussion about the medical malpractice phenomenon within the recent past has centered on claims and suits—the fact that they are increasing in number; the fact that they are becoming more costly to settle; the fact that they are driving insurance rates sky-high. Malpractice claims and suits are the most visible aspect of the problem, and in that sense may be the most reliable index of the problem's intensity. But claims and suits are simply the more or less formal way in which complaints about adverse results of treatment are expressed.

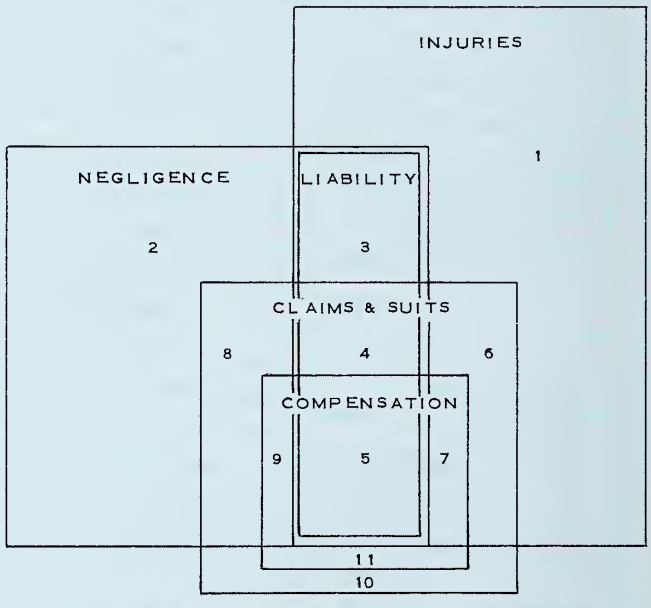
The genesis of virtually every malpractice claim or suit is a physical or mental injury or other adverse result of treatment sustained by the patient. This does not mean that every malpractice claim or suit is founded on negligent conduct by physicians or other health-care providers. As a matter of fact, the Commission's survey of malpractice claims' files closed in the year 1970 shows that most of the alleged injuries were not negligently caused—based upon what is probably the only useful gauge of this fact: a settlement or award was made to the injured person.

Nevertheless, the underlying problem begins with some injurious event in the course of treatment, and it is this fact which must be faced squarely if we are to develop any meaningful remedial action. It follows that attention must be directed to the root causes of medical injuries in order to reduce the likelihood of their occurrence as much as possible.

Many physicians believe that there are far more malpractice claims and suits than there are injuries to patients. They see the essence of the problem as a plethora of baseless (nuisance) claims and suits filed by dissatisfied patients. At the other end of the spectrum, many personal injury lawyers believe that there are a large number of injuries to patients which barely have been tapped by legal process. Thus far there have been little reliable data to support either position. There also has been little scientific effort to analyze the relationships between the volume of medical injuries incurred during medical management, the number due to negligence, the number of malpractice claims which have followed, and the number of such claims which have resulted in compensation to injured patients.

The Commission felt it essential to obtain a better understanding of these relationships and we were assisted greatly by one of our staff consultants, Don Harper Mills, M.D., J.D., who developed the following graphic portrayal of the pertinent relationships.

Medical Injuries, Negligent Conduct, and Medical Malpractice Claims†



Zone 1: all physical and mental medical injuries, whether or not caused by negligence.

Zone 2: all instances of negligent conduct by members of the health care team, whether or not such conduct caused injuries.

Zones 3, 4 and 5: (the overlap of zones 1 and 2) all injuries caused by negligence on the part of the health care team. These are the actionable injuries under the current tort system of liability and theoretically, should result in the payment of compensation.

Zones 4 through 11: all malpractice claims and suits filed.

Zones 8 and 9: all claims in which there is negligence but no injury. Claims in this zone usually are made by disgruntled patients who are dissatisfied with the results of treatment or with the manner in which it was provided.

Zones 10 and 11: logically, there might be some claims and suits even in the absence of injury or negligent conduct.

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

**Reprinted from *Medical Malpractuce, Report of the Secretary's Commission of Medical Malpractice.* DHEW publications No. (OS) 73-88, January 16, 1973.

†This chart is not intended to depict the actual size of each category. It is schematic only and must remain so until reliable data to measure them are forthcoming—Diagram by Don Harper Mills, M.D., J.D.

Zones 5, 7, 9 and 11: all claims and suits where compensation has been paid.

Zone 9: all claims and suits where there is negligence but no injury. On rare occasions the conduct of a member of the health care team may be so reprehensible that settlement is made in the absence of any injury to avoid adverse publicity and embarrassment.

Zone 7: all claims and suits in which compensation is paid for injuries which are not caused by negligence. Occasionally, the injury may be so devastating (brain damage or quadripegia) that a suit is compromised and payment is made even in the absence of negligence to avoid the possibility of a larger award by a sympathetic jury.

Zones 7, 9 and 11: all claims and suits paid that, under the present torte system of liability, theoretically are not justifiable for actual compensation.

When the malpractice problem is viewed in this manner, it is understandable why there are so many varying hypotheses about its nature and why solutions have not come easily. We believe that a great deal more attention must be devoted in the future to assessing the magnitude and relative size of the injury, claim, and compensation universes. Our pioneering survey of 1970 closed malpractice claims has developed much useful information on claims and compensation, and our two studies dealing with medical injury identification have given us a microcosmic look at the injury universe. Only with larger scale studies, however, will we obtain a better feeling for the size of these universes.

MEDICAL INTER-INSURANCE EXCHANGE OF NEW JERSEY REPORTS RESULTS OF PEER REVIEW PROGRAM

The Medical Inter-Insurance Exchange of New Jersy initiated a peer review program late in 1977 for the primary purpose of reviewing a potential claim with the defendant physician and a physician of the same specialty.

Mr. Bernard Genest, Claims Director for the MIIENJ, feels that the advantages gained from this program are: (1) the defendant's version of what happened; (2) the opportunity for another physician with his technical expertise to raise medical issues normally not uncovered for months, if at all, by traditional interviews by non-medical people; (3) the immediate understanding of illegible handwriting; (4) the resolution of apparent conflicts; (5) discovery of facts not mentioned in the records; (6) the focusing of issues; (7) the evaluation of the defendant's potential as a witness; (8) aid to the defendant in preparing for discovery that may follow; (9) and last, but not least, as a counseling session to assist the physician in psychologically dealing with this challenge to his professional competence.

In a December (1979) report to the Committee on Medical Defense and Insurance, Mr. Genest stated peer reviews had been held for 455 insured physicians. Of this number, 221 files were found to be defensible, 151 files indefensible and in 83 cases the insured felt the case to be indefensible and waived peer review. Of the 221 files found defensible, 46 have been closed without indemnity, the remaining 175 are proceeding to subpanel hearings or trial. Of the 151 files found indefensible, 79 were closed for a total indemnity of $7,100,000. Of those 83 files where the defendant waived peer review and admitted liability, 54 were closed with indemnity paid in the amount of $488,000.

Another 214 files were not peer reviewed because the cases were felt to be defensible on first view, but may have involved an issue of credibility. Of these, 76 have been closed with a total indemnity for seven cases of $12,300. The majority of the remaining 138 open files are expected to be tried successfully for the defendant.

Aside from the psychological benefits to the defendant physician and the financial savings which can accrue from an early decision as to whether a case is defensible or indefensible, many of the member physicians who voluntarily have elected to serve as peer reviewers report it to be a rewarding and an educational experience. Physicians interested in being a peer reviewer should contact Mr. Genest at the Medical Inter-Insurance Exchange of New Jersey office in Lawrenceville.

HEALTH ORGANIZATIONS COSPONSOR QUALITY ASSURANCE SEMINAR

A program entitled "Solutions 80" cosponsored by 17 New Jersey health care organizations will be held on March 5 at the Governor Morris Inn in Morristown and at the Cherry Hill Inn, Cherry Hill on March 7. The program, geared for New Jersey hospitals, deals with an integrated approach to Quality Assurance/Risk Management activities within the hospital. Care Communications Incorporated, a Chicago-based firm will provide the faculty for both sessions. Dr. Warren Nestler of Overlook Hospital also will serve as faculty, adding a New Jersey perspective for application of the techniques espoused by Care Communications.

The Medical Society of New Jersey, the New Jersey Foundation for Health Care Evaluation, the Academy of Medicine of New Jersey, The Medical Inter-Insurance Exchange, the New Jersey Professional Standards Review Organizations, and the PSR Council are supporting the program. The New Jersey Hospital Association, in conjuction with the New Jersey Foundation, will be coordinating the program. Continuing education credits will be earned by physicians attending these sessions.

Inquiries may be directed to Kathleen Tascione at the Foundation offices in Lawrenceville, (609) 896-2880.

DID YOU KNOW

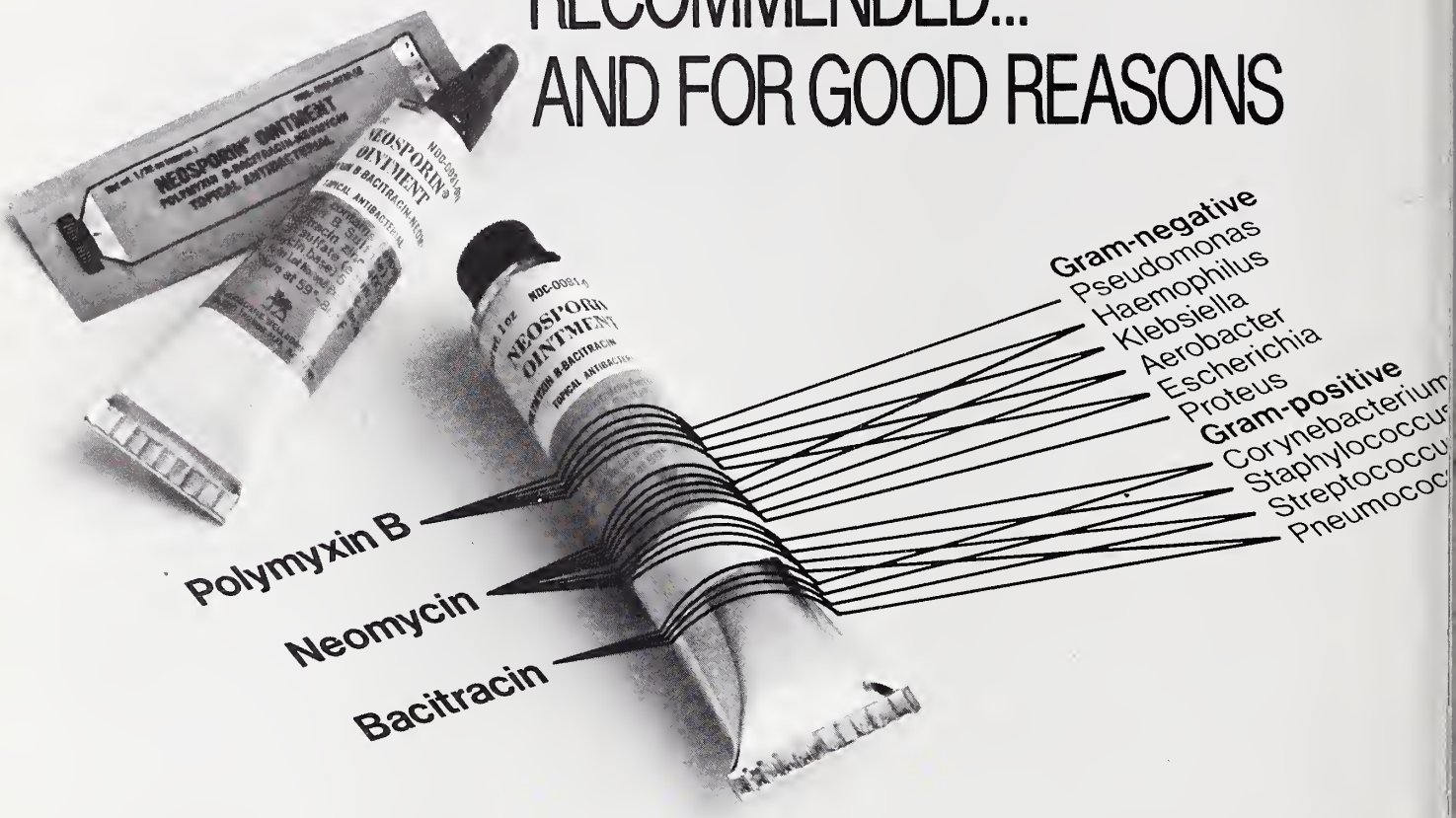
. . . "Eventually we hope to protect our members more effectively against malpractice suits which are becoming alarmingly common. It seems to be a fashionable way for some to pay their physician's bill."[a] So remarked Frederick H. Wiggin, M.D., in 1900 to his New Jersey associates. By 1906 many New Jersey physicians were insured for malpractice claims at a cost of about $10 a year.

. . . A recent survey of Medical Inter-Insurance Exchange of New Jersy claims reveals that 27 percent of them emanated from the physician's office. Of those claims emanating within the hospital setting, the operating room accounted for 47 percent, the emergency room for 10 percent and radiology for .09 percent

. . . Nationally, males account for 43 percent of all claims and females account for 57 percent.

[a]Rogers, FB, Sayre, AR: *The Healing Art.* Trenton, NJ, Medical Society of New Jersey. 1966, p. 209.

IT'S HIGHLY RECOMMENDED... AND FOR GOOD REASONS



1. provides broad-spectrum, overlapping antibacterial effectiveness against common susceptible pathogens, including staph and strep
2. helps prevent topical infections, and treats those that have already started
3. it's good medicine for abrasions, lacerations, open wounds, primary pyodermas, secondarily infected dermatoses; and it's painless and cosmetically pleasing
4. contains three antibiotics that are rarely used systemically
5. you can recommend it in any of the three convenient package sizes: 1 oz tube, ½ oz tube, or the versatile, single-use foil packet



selected by NASA for the Apollo and Skylab missions

NEOSPORIN® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

ONE HUNDRED YEARS WELLCOME

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

EDITORIALS

A New Feature

The essential interest of individual physicians in the ideas and activities of our federal government and our New Jersey representatives continues to grow. In order to permit our Senators and Congressmen the opportunity to speak directly to the large medical readership of our *Journal,* your editor has invited each of them to submit a thesis for publication on a topic of mutual concern.

The new department, "Your Congressman Speaks," starts in the present issue. Congresswoman Millicent Fenwick makes some sensitive observations on Cambodia, gained during her recent visit to that ill-fated land (page 129).

We anticipate material to be wide ranging—from national health insurance to the problems of aging and the environment.

A.K.

Technology Assessment

Robbins believes that the "prospective assessment of the outcome of research might be desirable," while admitting that the assessment procedure is expensive, difficult, and not always successful.* He defines technology assessment as "the systematic analysis of the anticipated impact of a particular technology in regard to its safety and efficacy as well as its social, political, economic, and ethical consequences." Technology broadly includes "the techniques, drugs, biologicals, equipment, and procedures used by the health care professionals" to treat patients and to operate the health care system.

One readily can see how such a concept of prospective assessment might have positive and negative effects on both basic and clinical research and the applications of their results to people. Suppose assessors had been assigned to the computed tomography scanner, prior to its general application, for evaluation. They probably could have analyzed its safety, efficacy, and economic features reasonably well. What about the political and ethical consequences? That would have been tougher. Would they have guessed that individual physicians, groups of physicians, hospital administrators, and even communities, would vie for the right to own and operate such equipment? Would they have dealt easily with such political issues as certificates of need in relation to such expensive equipment? Might a lack of medical knowledge of the broad implications of such equipment and its potential have led to its suppression? It's possible!

Technology assessors might have squelched the idea of splitting the atom because of the danger of a nuclear holocaust or for many other scientific, ethical, or political reasons. They might have buried renal dialysis if they had realized that the United States soon will be spending more than two billion dollars each year for such a program, for the benefit of a relative handful of patients. They one day may veto the consummate development of a closed-loop implantable insulin supply system on the basis that it *might* keep a large segment of the population—ten million diabetics—alive long enough to go blind, to develop nephropathy and neuropathy, and require billions of dollars worth of social and medical services while they propagate even more victims of this "incurable" complex metabolic disease.

The concept of evaluation post hoc is well known in medical research, but not always easy to do. On the other hand, prospective assessment is infinitely more difficult, requiring, very likely, a computerized crystal ball. The evaluatory process, in addition to a sizable budget and supportive bureaucracy, will require special people. The assessors clearly will need to be familiar with the process of evaluation and have strong backgrounds in statistics, social psychology, public health administration and regulation, and a variety of other disciplines. Scientists themselves must be the center of such assessment teams, but in some way, the public must be involved as well. After all, it is their dollars, their bodies, and their lives that will be on the line.

We physicians are becoming quite familiar with the use of process audit in our hospitals on a regular basis. Some criteria for technology assessment can be described in relation to most diseases or conditions without difficulty, but others are more puzzling. They might include:

1. Current knowledge as to the burden of the disease in terms of its prevalence, morbidity, mortality, and economic importance.

*Robbins FC: Assessing the consequences of biomedical research. *Proc 1977 Sun Valley Forum on National Health.* DHEW Pub. No. (PHS) 79-3216.

2. The state of the therapeutic art in relation to the condition, i.e., prevention, early intervention, cure, rehabilitation.

3. Is the technology being assessed likely to be definitive in terms of control of the disease?

4. If the technology appears to be definitive, is it affordable and what undesirable side-effects are likely to be generated?

5. Will benefits—and burdens (financial or otherwise)—of the technology be distributed over a broad or a narrow segment of the population?

6. What will the impact of the technology be on the quality of life of the victims of the condition, as well as the rest of society?

A technological breakthrough, such as the seat belt, would be relatively easy to assess. Suppose a pharmacologist developed a tasteless, odorless, subtle drug which, when added to the community drinking water, would eliminate anxiety, anger and hostility, and tranquilize its population into mindless pussycats? How would political, religious, and scientific leaders deal with that one? With great difficulty!

Like so many essential concepts, technical assessment will not be universally applicable. It will be expensive. It could spawn greater bureaucracies. It may not be able to come up with good answers on every evaluation, but what does? Some great ideas and technological advancements might be squelched while some monsters with unforeseen vices might be approved. The first line of technology assessment must be the research worker himself, however, he must not be required to carry the burden of consequences on his shoulders alone. Dynamite has generated good and evil—as has nuclear fission—but the uses to which scientific discoveries are placed come from the minds of human beings. There lies the unanswerable question which social scientists must help us to understand.

The effects of technological advancement must be addressed in a systematic fashion soon after the germination of an idea. The who, how, when, and where of assessment needs to be considered now. A.K.

You Were Wrong, Robert Frost

In an editorial-poem, America's poet laureate and Pulitzer Prize winner wrote:

No Holy Wars for Them*

States strong enough to do good are but few.
Their number would seem limited to three.
Good is a thing that they the great can do,
But puny little states can only be.
And being good for these means standing by
To watch a war in nominal alliance,
And when it's over watch the world's supply
Get parceled out among the winning giants.
God, have you taken cognizance of this?
And what on this is your divine position?
That nations like the Cuban and the Swiss
Can never hope to wage a Global Mission.
No Holy Wars for them. The most the small
Can ever give us is a nuisance brawl.

It is unlikely that the bard of Massachusetts had ever heard of Iran's Ayatollah Ruhollah Khomeini; he may have been aware of some of the activities of the deposed Shah of Iran, Mohammed Riza Pahlevi, but he could not have anticipated the international events which have taken place since mid-November 1979 when a band of so-called "students" invaded the U.S. Embassy in Tehran and took more than 60 Americans as hostages. This is no "nuisance brawl," but a threat to world peace.

The passions of the time, whether legitimate or psychopathic in origin, could indeed spark a holy war, and even a local conflagration of that nature, considering the worldwide populace of the Muslim faith, could start the atomic holocaust which would end life on earth as humanity knows it.

Historians, philosophers, and sociologists learn from the events of history, but politicians, dictators, and psychopaths do not. Let us hope the social scientists of the world can discover how human beings can get along with each other and then learn how to change attitudes based on self-interest and the lust for power. Time is running out on us, so the experts on social psychology had better get into high gear! A.K.

*Complete Poems of Robert Frost. New York, Holt, Rinehart and Winston of Canada, Ltd. Multiple copyrights from 1916-1964.

only BRONKODYL®

brand of

theophylline, USP (anhydrous)

is 100% micro-pulverized, anhydrous theophylline, in capsules



- Bioavailability equal to an elixir[1]
- Achieves blood levels rapidly[1]

[1] Tinkelman, D.G., Carroll, M.S., Vanderpool, G., Jones, M.: The bioavailability of theophylline in elixir and micro-pulverized forms. Medical Challenge 10 24-26, 1978.

BREON

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016

BRONKODYL®

BRAND OF THEOPHYLLINE, USP (ANHYDROUS)

BRIEF SUMMARY: Before prescribing, please consult complete prescribing information, a summary of which follows:

INDICATIONS: For relief and/or prevention of bronchospasm associated with bronchial asthma, chronic bronchitis and emphysema.

CONTRAINDICATIONS: Hypersensitivity to any of its components.

WARNINGS: Theophylline should be used with caution in children and in others who are currently taking bronchodilator products, especially in rectal dosage form, which may contain theophylline or related drugs.

Status asthmaticus is a medical emergency. Addition of corticosteroids and other medications to bronchodilator therapy may be required.

Serum theophylline levels should be monitored at appropriate intervals for dosage adjustment. High serum levels of theophylline and resultant toxicity may occur with conventional doses in patients with decreased theophylline clearance as found with cardiac failure, liver disease, chronic obstructive pulmonary disease, and in geriatric patients.

Early signs of theophylline toxicity, such as nausea and restlessness may not occur prior to convulsions or ventricular arrhythmias. Pre-existing arrhythmias may be worsened by theophylline.

Usage in Pregnancy: Theophylline safety in pregnancy has not been established. Use of Bronkodyl during lactation or in women of childbearing potential requires that possible benefits of the drug be weighed against possible hazards to fetus or child.

PRECAUTIONS: Smokers may require larger doses of theophylline because of a shorter half-life in these patients.

Theophylline should not be administered concurrently with other xanthines.

Caution should be observed in patients with cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease, peptic ulcer, and in the elderly and neonates. Patients with congestive heart failure in particular may have markedly prolonged serum half-lives of theophylline.

ADVERSE REACTIONS: Most adverse reactions to theophylline are seen with serum levels exceeding the therapeutic range. *Gastrointestinal:* nausea, vomiting, epigastric pain, hematemesis, diarrhea. *CNS:* headache, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions. *Cardiovascular:* palpitations, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, ventricular arrhythmias which may be life-threatening. *Respiratory:* tachypnea. *Renal:* diuresis, albuminuria. *Other:* hyperglycemia, inappropriate ADH secretion

Drug Interactions: Toxic synergism with ephedrine and other sympathomimetic bronchodilators may occur.

OVERDOSAGE Treatment:

A. If potential oral overdose is established and seizure has not occurred: 1) Induce vomiting 2) Administer a cathartic. 3) Administer activated charcoal.

B. If patient is having a seizure: 1) Establish an airway. 2) Administer O_2. 3) Treat the seizure with intravenous diazepam, 0.1 to 0.3 mg/kg up to 10 mg. 4) Monitor vital signs, maintain blood pressure and provide adequate hydration.

C. Post-seizure coma: 1) Maintain airway and oxygenation. 2) If a result of oral medication, follow above recommendations to prevent absorption of drug, but intubation and lavage will have to be performed instead of inducing emesis, and the cathartic and charcoal will need to be introduced via a large bore gastric lavage tube. 3) Continue to provide full supportive care and adequate hydration while waiting for drug to be metabolized. In general, the drug is metabolized sufficiently rapidly so as to not warrant consideration of dialysis.

HOW SUPPLIED:

Bronkodyl 100 mg, brown and white capsules in 100's	Code 1831
Bronkodyl 200 mg, green and white capsules in 100's	Code 1833



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

Perforation of the Gallbladder: Analysis of 22 Cases*

GEORGE J. PAUL, M.D., Trenton

A five-year review of our hospital's experience with 22 cases of perforation of the gallbladder is presented. The diagnosis was established during 1210 gallbladder operations for an incidence of 1.74 percent. Among cases of acute cholecystitis, the incidence was 5.2 percent. The various types of perforation are presented. The considerable mortality, morbidity, and length of stay rates associated with perforation of the gallbladder suggest that early surgical treatment of acute cholecystitis is warranted if the incidence of perforation of the gallbladder is to be reduced.

Interest in, and therefore published articles about certain topics wax and wane. During the 1940's and 1950's, journals had several articles about perforated gallbladders. Since that period, the topic seems to have faded from popularity. Few review articles [1-5] have been written in the last 20 years. Yet perforation of the gallbladder continues to be seen and with it high mortality and morbidity rates. Even more important is the fact that there is delay in recognition and treatment in many cases. This topic is reviewed in the hope of creating a greater awareness among physicians and surgeons and fostering more prompt treatment.

Our institution recently had four patients with perforated gallbladder within a three-month period. This prompted us to review the hospital's cases of perforation of the gallbladder occurring during the period July 1973 through June 1978.

INCIDENCE

During the period under review, there were 22 cases of perforation of the gallbladder among 1210 gallbladder operations performed; the overall incidence rate of perforation was 1.8 percent. The incidence of perforation was 5.2 percent in 427 cases of acute cholecystitis.

Although perforation of the gallbladder is not a common occurrence, it certainly is not rare. Approximately five percent of acutely inflamed gallbladders perforate (Table 1).

TYPES OF PERFORATION

The classification of Neimeier,[14] dating back to 1934, still is commonly used. His three groups are: (a) free perforation into the peritoneal cavity, (b) localized, walled-off perforations usually with abscess formation, and (c) perforation into a viscus with fistula formation. Stout and Hibbard,[15] in 1943, devised a somewhat more elaborate classification, as follows: (a) acute free perforation, (b) perforation with formation of a pericholecystic abscess, (c) perforation into the liver, (d) perforation into a viscus with fistula formation, and (e) external perforation. We shall use Neimeier's classification.

The usual perforation becomes walled off with the formation of a localized abscess. In our series, we had ten such cases. The most serious type is free perforation into the peritoneal cavity, often with bile and bacterial peritonitis, resulting in a gravely ill patient. We had eight such cases. Perforation into a viscus may cause intestinal obstruction and "gallstone ileus" if a large enough calculus is passed from the gallbladder to the small intestine. Distal ileum is the usual site of obstruction in these cases. In our series,

*From the Department of Surgery, St. Francis Medical Center, Trenton, New Jersey, where Dr. Paul is Director of Surgery; he also is Clinical Professor of Surgery, Hahnemann Medical College, Philadelphia. Correspondence may be addressed to him at St. Francis Medical Center, 601 Hamilton Avenue, Trenton, NJ 08629.

fistulization occurred four times, with one case of gallstone ileus. We had no instances of perforation into the liver, nor any external perforations.

Our patients had more free perforations than one normally encounters. The reasons for failure of normal body defenses to wall off and contain the perforation were not apparent.

AGE AND SEX

The average age was 66 years, with a range of 26 to 88. There were 15 females (68 percent) and 7 males (32 percent), which is in keeping with the higher incidence of gallbladder disease in females.

DURATION BETWEEN ADMISSION AND SURGERY

Duration of symptoms prior to admission varied widely from a few hours to many weeks. Of greater importance is the duration of time between admission to the hospital and the performance of the required surgery. This is the period of time when the attending physician can control when surgery will take place. The average time from admission to surgery was 6.2 days. When the patient originally was admitted to the medical service, the duration was 5.7 days; when admitted to the surgical service, the average duration was 6.5 days. Therefore, the surgeons tended to wait longer when dealing with acute cholecystitis.

The duration of surgical delay ranged from one to 19 days. Many of these elderly patients had concomitant diseases which had to be treated and controlled before surgery could be performed (Table 2).

CLINICAL OBSERVATIONS

The majority of these patients were admitted with the diagnosis of acute cholecystitis. Other admitting diagnoses were: chronic cholecystitis, partial small bowel obstruction, carcinoma of the stomach, Crohn's disease, recurrent cholecystitis, incarcerated umbilical hernia, and large bowel obstruction.

Although many had signs and symptoms of an "acute surgical abdomen," such as fever, leukocytosis, pain, tenderness, rebound tenderness, guarding, and a palpable tender mass in the right upper quadrant of the abdomen, there were delays in recognizing the seriousness of the illness. Patients with the admitting diagnosis of acute cholecystitis had as long a delay as those with other presumptive diagnoses.

Several of the patients with acute cholecystitis were subjected to intravenous pyelograms and concomitant barium enema examinations, so as to "have a complete workup before future surgery." On one chart, a progress note states the following: "will do a stat double dose cholecystogram since fever and rising white blood count make it appear patient is probably developing acute gangrene of the gallbladder." This was written by a surgeon! At surgery, performed two days later, patient was found to have a free perforation of the gallbladder with bile peritonitis!

SURGICAL PROCEDURES

Of the twenty-two cases, the diagnosis of perforated gallbladder was made at surgery in all but one. That patient was admitted in a moribund state, died before surgery could be performed, but was found to have a perforated gallbladder at postmortem examination. Of the twenty-one operated cases, there were 18 cholecystectomies (86%) and three cholecystostomies (14%). Concomitant procedures included four common duct explorations. In the four patients in whom a cholecysto-viscus fistula was present, cholecystectomy was followed by repair of the stomach in one patient, colon in another, and duodenum in two others. An umbilical herniorrhaphy also was performed in one patient.

Table 1
Percentage of Perforation of Gallbladder in Acute Cholecystitis

Year of Report*	Percent
1941 [6]	15.4
1942 [7]	7.1
1943 [8]	0.9
1951 [9]	2.8
1954 [10]	1.6
1957 [11]	4.6
1957 [12]	3.9
1960 [1]	2.2
1960 [4]	4.6
1962 [5]	8.3
1966 [2]	3.3
1975 [13]	5.0
1976 [3]	3.8
1978 (present study)	5.2

*Superior numbers correspond to list of references at end of article.

Table 2
Interval Between Admission and Surgery

Days	Number of Patients
1	4
2-4	6
5-7	6
8-14	4
15-21	2

Table 3
Post-Operative Length of Stay

Days	Cases
< 10	6
10-20	9
20-30	5
> 30	2
Average 18.1	22

POSTOPERATIVE LENGTH OF STAY

The length of stay ranged from six to 54 days with an average of 18.1 days. This compares unfavorably with the usual length of stay of 9.5 days for the same approximate age group undergoing elective cholecystectomy. Many of the patients not only had lengthened stays, but their course of recovery was stormy with multiple complications, such as heart failure, renal shutdown, wound infection, prolonged ileus, stroke, small-bowel fistulization, intra-abdominal abscess, and gram-negative septicemia (Table 3).

Many of the patients not only had lengthened stays, but their course of recovery was stormy with multiple complications.

I am firmly convinced that early surgery should be performed in cases of acute cholecystitis.

MORTALITY

Our series had three deaths with a mortality rate of 13.6 ercent. Mortality rates reported in the literature vary so idely and are dependent upon so many variables, that neaningful comparisons cannot be made. Deaths occurred n two patients with free perforation, a 25 percent mortality ate in this type of case.

COMMENTS

Perforation of the gallbladder is a most serious event hich occurs more often than it should. Because it often ccurs in older, debilitated patients, it carries a high mortal-ty and an even higher morbidity, as evidenced by the rolonged postoperative stay in most of our cases. I am irmly convinced that early surgery should be performed in ases of acute cholecystitis. The age-old controversy of early s. late surgery for cholecystitis[6,13,16,17] gradually has resolved tself; today most surgeons would treat acute cholecystitis by arly surgery after proper hydration and medical prepara-ion. Prompt surgery would prevent many of the cases of erforation.

It is interesting that the delay in operation was longer hen the patient was treated by a surgeon as compared to ne being treated by a medical physician who then trans-erred the patient to the surgical service.

A review of the clinical preoperative course of our cases ailed to reveal any positive diagnostic clues which would orewarn the surgeon or physician of an impending per-oration. All of the patients had signs and symptoms com-atible with the uncomplicated acute cholecystitis: upper bdominal pain, often colicky in nature; low-grade fever; pper abdominal tenderness; often with rebound tenderness; nuscle guarding; elevated white blood cell counts; and ilirubin and alkaline phosphatase determinations at normal evels.

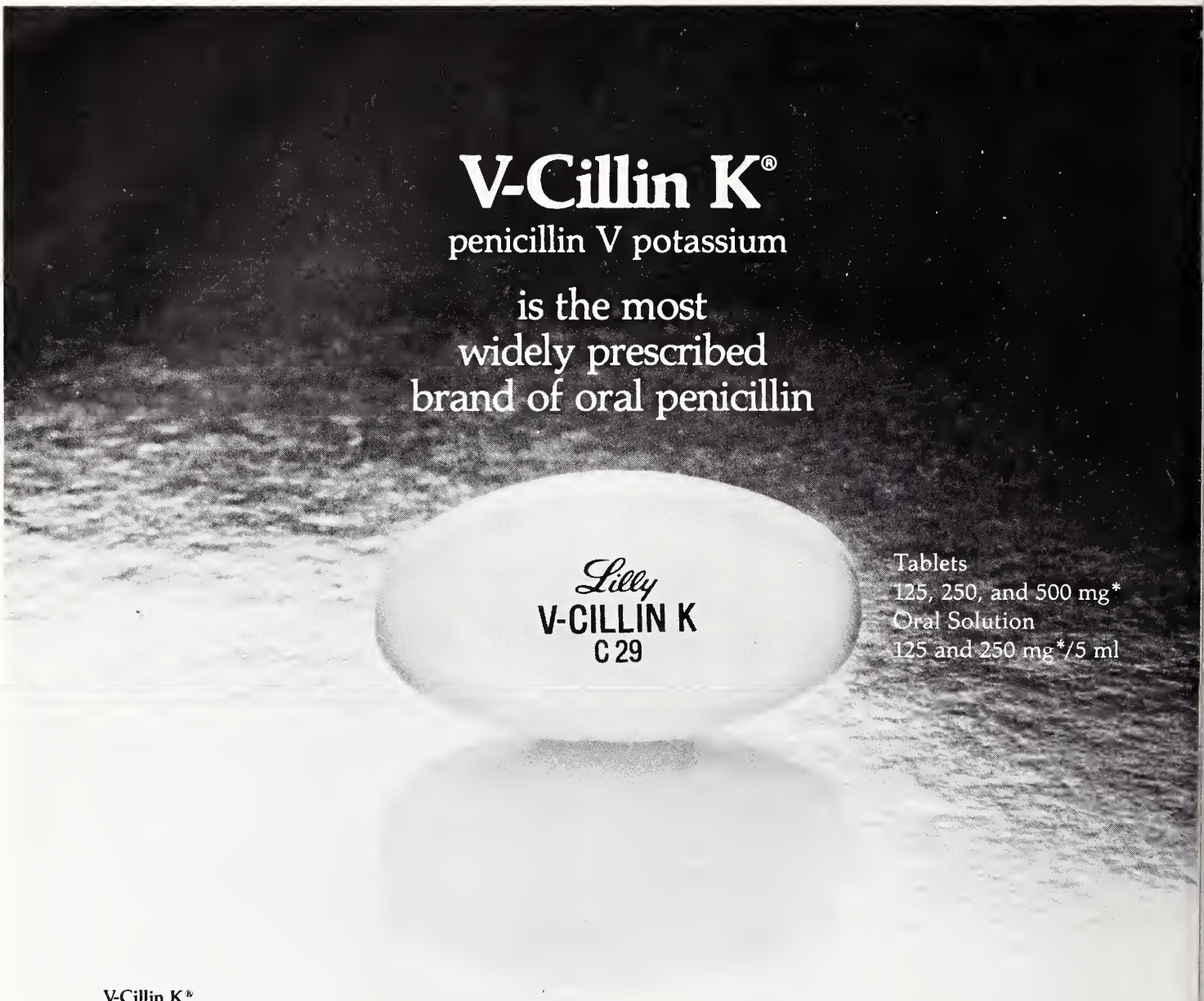
We feel that surgery in acute cholecystitis is an urgent, but ot often an emergency measure. At surgery, a cholecystec-omy is the operation of choice, providing there are no signs or symptoms of common duct involvement. We agree with Glenn and others[18-20] that cholecystostomy has a place in elderly, high-risk patients. We also perform operative cholangiography on the majority of our cases, and find this procedure extremely helpful in detecting common duct pathology which otherwise would have been overlooked.

SUMMARY

That perforation of the gallbladder is still a problem to be reckoned with is borne out by the statistics presented in this paper. Its incidence is not uncommon, and it carries a significant morbidity, mortality, and protracted length of stay. The fact that its occurrence is usually in the older age groups is further impetus to early surgery especially in view of the paucity of distinguishing clinical features of this entity.

REFERENCES

1. Gallagher WB: Perforation of the gallbladder. *Am J Surg* 100:407, 1960.
2. Cowley LL, Wood VW: Perforation of the gallbladder. *Clin Med* 73:37, 1966.
3. Williams NF, Scobie TK: Perforation of the gallbladder: Analysis of 19 cases. *Can Med Assn J* 115:1223, 1976.
4. McCubbrey D, Thieme ET: Perforation of the gallbladder. *Arch Surg* 80:204, 1960.
5. Strohl EL, Diffenbaugh WG, Baker JH: Gangrene and perforation of the gallbladder. (abstr) *Surg Gynec Obstet* 114:1, 1962.
6. Wallace R, Allen AW: Acute cholecystitis. *Arch Surg* 43:762, 1941.
7. Glenn F, Moore SW: Gangrene and perforation of the wall of the gallbladder. *Arch Surg* 44:677, 1942.
8. Cowley LL, Harkins HN: Perforation of the gallbladder. *Surg Gynec Obstet* 77:661, 1943.
9. Fletcher LL, Ravdin IS: Perforation of the gallbladder. *Am J Surg* 81:178, 1951.
10. Pines B, Rabinovitch G: Perforation of the gallbladder in acute cholecystitis. *Ann Surg* 140:170, 1954.
11. Morse L, Krynski B, Wright AR: Acute perforation of the gallbladder. *Am J Surg* 94:772, 1957.
12. Massie JR, Coxe JW, Parker C, Dietrick R: Gallbladder perforation in acute cholecystitis. *Ann Surg* 145:825, 1957.
13. Gagic N, Frey CF, Gaines R: Acute cholecystitis. *Surg Gynec Obstet* 140:868, 1975.
14. Niemeier OW: Acute free perforation of the gallbladder. *Ann Surg* 99:922, 1934.
15. Stout SL, Hibbard JS: Perforation of gallbladder. *Surg* 13:734, 1943.
16. MacDonald JA: Early cholecystectomy for acute cholecystitis. *Can Med Assn J* 111:796, 1974.
17. Zollinger RM, Boles ET, Crawford GB: The diagnosis and management of biliary-tract disease. *N Engl J Med* 252:203, 1955.
18. Glenn F: Cholecystostomy in the high-risk patient with biliary tract disease. *Ann Surg* 185:185, 1977.
19. Cafferata HT, Stallone RJ, Mathewson CW: Acute cholecystitis in a municipal hospital. The role and results of cholecystostomy. *Arch Surg* 98:435, 1969.
20. Welch JP, Malt RA: Outcome of cholecystostomy. *Surg Gynec Obstet* 135:717, 1972.
21. Gupta S, Udupa KN: Free perforation of the gallbladder with special reference to diagnostic paracentesis. *Interntl Surg* 61:292, 1976



V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

Drinking and Pregnancy

M.A. PELOSI, M.D., ALVIN LANGER, M.D.,
JOSEPH APUZZIO, M.D., H.A. KAMINETZKY, M.D.,
and DONALD FRICCHIONE, M.D., Newark*

Excessive use of alchohol by gravid women can result in a characteristic pattern of antenatal and postnatal growth retardation, psychomotor retardation and developmental anomalies which constitute the "Fetal Alcohol Syndrome." The fetus appears to be especially vulnerable in early pregnancy and unless drinking is reduced early during, or preferably before pregnancy, irreversible damage to the fetus may occur. Adequate evaluation of drinking patterns is an essential component of antepartum care and public education programs are needed to eliminate the problem.

The association between maternal alcoholism and abnormalities in the offspring is an old observation. Warner and Rossett documented that adverse effects were recognized during antiquity; the Greeks and Romans believed that alcoholism at the time of conception could lead to abnormal offspring.[1] In 1720, the English Government removed restrictions on distilling and, as a consequence, inexpensive gin of poor quality became available. From the so-called "gin epidemic" between 1720 and 1750 came the first direct observations of the adverse effects of alcohol on the offspring. Medical literature on the subject became abundant and supported the concept that alcohol abuse by parents might result in defective children. Unfortunately, interest in the topic subsequently diminished and, by the 1940's, medical opinion regarded the idea that alcohol harmed the fetus as unfounded.

In 1968, Lemoine in France reported malformations in a group of babies born to alcoholic mothers.[2] Five years later, Jones and his associates described similar findings and created the term Fetal Alcohol Syndrome.[3] Since the publication of these experiences, interest in the adverse effects of alcohol on the fetus has been revived. Over two hundred children with anomalies felt to be due to maternal ingestion of ethanol have been reported and the potential problem is well recognized by physicians and paramedical personnel caring for pregnant women.

CLINICAL FEATURES

A number of clinical findings have been described as comprising the Fetal Alcohol Syndrome including:

(1) Prenatal growth deficiency affecting both length and weight. This is the most consistent finding and persists after birth, even if the child is provided with an excellent environment.[4]

(2) Craniofacial abnormalities: microcephaly, short palpebral fissures, maxillary hypoplasia, epicanthal folds, strabismus, ptosis of eyelids, microphthalmia, and cleft palate.

(3) Limb and joint anomalies: restriction of movement, hip dislocations and an altered palmar crease pattern.

(4) Cardiac abnormalities: ventricular septal defect is the most frequent.

(5) Delay of gross and fine motor development.

(6) Mental retardation or minimal brain dysfunction (hyperactivity, poor school performance, and others.[5]

(7) Miscellaneous defects: pectus excavatum,

*Dr. Pelosi is Clinical Assistant Professor of Obstetrics and Gynecology; Dr. Langer is Professor of Obstetrics and Gynecology; Dr. Apuzzio is Assistant Professor of Obstetrics and Gynecology; Dr. Kaminetzky is Professor and Chairman, Department of Obstetrics and Gynecology; Dr. Fricchione is Clinical/Assistant Professor of Obstetrics and Gynecology, New Jersey Medical School, CMDNJ, Newark. Correspondence may be addressed to Dr. Pelosi at 47 Penwood Drive, New Providence, New Jersey 07974.

hemangiomas, external genital anomalies, ear anomalies, small nails, and hirsutism.

The abnormalities found are not consistent and their severity is variable and unpredictable.

An acute alcohol withdrawal syndrome in the neonate has been reported secondary to long-term maternal ingestion of alcohol extending to immediately prior to delivery.[6] While the infants usually are depressed at birth and often require resuscitation, withdrawal manifestations, which begin within twenty-four hours after birth, include agitation, excess crying, irritability, sweating, and seizures.

Epidemiologic studies have confirmed the effects of maternal alcohol ingestion in the offspring. In a prospective study of 55,000 pregnant women and their children who were observed for up to seven years following birth in twelve medical centers, Jones *et al.* found twenty-three women with a history of established alcoholism during pregnancy.[7] The findings suggested that drinking during pregnancy significantly increased the risk to the offspring. Adverse effects occurred in 43 percent of the pregnancies of these twenty-three women. Four of the 23 infants died in the perinatal period and six exhibited findings consistent with the Fetal Alcohol Syndrome. This compared to a rate of two percent of adverse effects in the control group. Furthermore, in the nineteen surviving children born to alcoholics, deficient intellectual performance at seven years of age, manifested by an I.Q. of seventy-nine or below, was found in 44 percent of the children compared with nine percent in matched controls. In another study of 633 pregnant women and their offspring, the frequency of congenital, growth, and neurological abnormalities and of prematurity was twice as high among infants born to heavy drinkers as compared to the offspring to moderate or light drinkers.[8]

MECHANISM OF ACTION

The specific mode of action of ethanol upon the fetus has not yet been determined. Alcohol freely crosses the placenta with an equilibrium rapidly occurring between maternal and fetal blood levels.[9] In animal studies it is found in the amniotic fluid and in many fetal tissues. Alcohol is distributed in the tissues in proportion to their water content. Since the water content of the fetus is extremely high during early pregnancy, the fetus concentrates a greater proportion of the alcohol in its tissues compared to later stages of pregnancy.[4] Alcohol is thus present to exert its adverse effects on morphogenesis at that critical time. The precise abnormalities may depend upon the embryologic events occurring at the time of exposure. Autopsies of neonates with the fetal alcohol syndrome quite constantly exhibit aberrations of neuronal migration, resulting in multiple nervous system anomalies. These structural abnormalities may be the cause of the disturbed neurologic function characteristic of the syndrome.[10] In general, the most severe retardation occurs in those babies with the worst somatic abnormalties, but this may not be true in any given case.[11] The variability in the clinical findings may be due to the superimposition of effects of other concomitants such as nutritional deficits, smoking, caffeine, other drugs, and harmful environmental agents. The risk and extent of the abnormalities produced in both humans and animals does appear to be dose related, increasing directly with the quantity of maternal alcohol intake.[8,12]

COMMENT

It is difficult to understand that the potentially disastrous effects of alcohol abuse upon the fetus had been unrecognized for such a long period of time and that only recently has interest in the subject been revived. Although completely safe levels of ingestion are unknown, effects apparently are noted when the equivalent of three ounces of absolute alcohol, or about five drinks per day are consumed.[8] However, there is some suggestion that even smaller amounts may lead to some anomalies and caution is advised.[8]

Because the peak blood alcohol concentration may be a critical factor, physicians should counsel each patient to consume no more than two drinks in any single day, even if she drinks alcoholic beverages only occasionally and to avoid binge drinking. Until more information is available regarding dose-effect relationships, it is preferable for the pregnant woman to avoid alcohol intake completely, particularly during early gestation.

A careful history of alcohol use should be obtained from each antepartum patient and women with drinking problems should be counseled appropriately. This preferably is accomplished prior to pregnancy; if that is impossible because of lack of physician contact, it should be done as early in the pregnancy as possible. Women with chronic or severe drinking problems should be discouraged from becoming pregnant until these problems are brought under control. If already pregnant, alcoholics should be viewed as possible candidates for termination of pregnancy. An accurate history of alcohol ingestion often is not obtained because the physician fails to ask the patient, or because the patient intentionally withholds the information or she discounts drinks such as wine with meals. Frequent physician-patient encounters during pregnancy offer an excellent opportunity for evaluation and education regarding this potentially disastrous condition. Public information and education programs concerning drinking alcohol and pregnancy may help to eliminate this syndrome entirely, if presented prior to conception.

REFERENCES

1. Warner RH, Rossett HL: The effects of drinking on offspring. An historical survey of the American and British literature. *J Studies Alcohol* 36:1395, 1975.
2. Lemoine P, Haroussean H, Bourteyru JP, *et al*: Les enfants de parents alcoholiques. Anomalies observées. À propos de 127 cas. *Ouest Med* 25:477, 1968.
3. Jones KL, Smith DW, Ulleland CN, *et al*: Pattern of malformation in offspring of chronic alcoholic mothers. *Lancet* 1:1267, 1973.
4. Hinckers HJ: The influences of alcohol on the fetus. *J Perinat Med* 6:3, 1978.
5. Hanson JW, Jones KL, Smith DW: Fetal alcohol syndrome: Experience with 41 patients. *JAMA* 235:1458, 1976.
6. Ostrea EM, Ting EC, Cohen S: Neonatal withdrawal from non-narcotic drugs In: *Drug Abuse in Pregnancy and Neonatal Effects*. Rementeria JL (ed). St. Louis, C.V. Mosby Company, 1977, p. 165.
7. Jones KL, Smith DW, Ulleland CN, *et al*: Outcome in offspring of chronic alcoholic women. *Lancet* 1:1076, 1974.
8. Ouellette EM, Rossett HL, Rosman P, *et al*: Adverse effects on offspring of maternal alcohol abuse during pregnancy. *N Engl J Med* 297:528, 1977.
9. Dilts PV Jr.: Placental transfer of ethanol. *Am J Obstet Gynecol* 107:1195, 1970.
10. Clarren SK, Alvord EC, Sumi SM, *et al*: Brain malfunctions related to prenatal exposure to ethanol. *J Pediatr* 92:64, 1978.
11. Streissguth AP, Herman CS, Smith DW: Intelligence, behavior, and dysmorphogenesis in the fetal alcohol syndrome: A report on 20 patients. *J Pediatr* 92:363, 1978.
12. Rossett HL, Ouellette EM, Weiner L, *et al*: Therapy of heavy drinking during pregnancy. *Obstet Gynecol* 51:41, 1978.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D., R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg Buccal/10 mg Oral/25 mg Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Remember

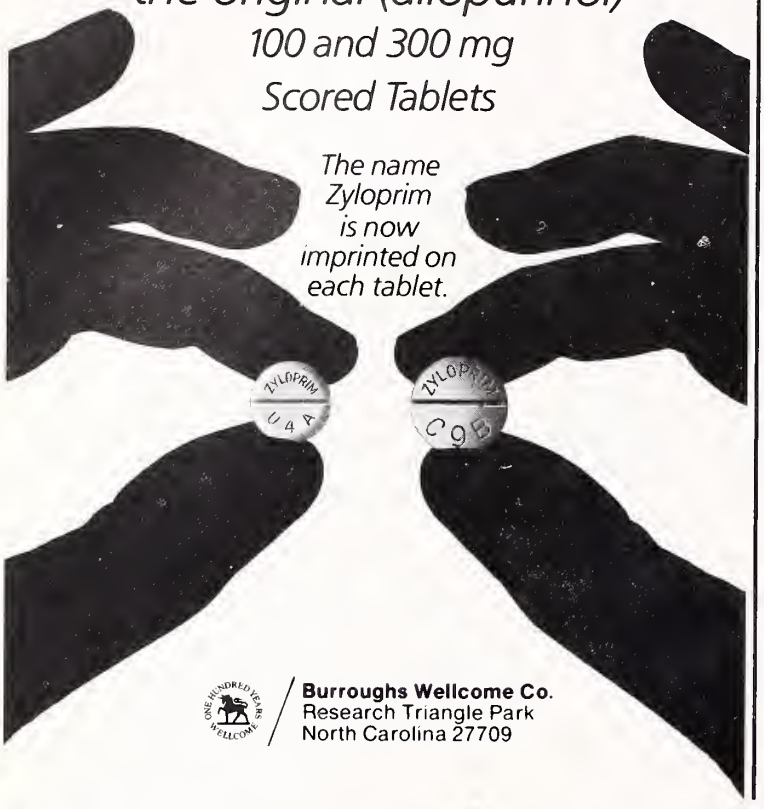
ZYLOPRIM®

the original (allopurinol)

100 and 300 mg

Scored Tablets

The name Zyloprim is now imprinted on each tablet.



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Rx FOR DOCTORS

new, or established practice

Rx As experienced certified public accountants and consultants in the financial field, and having worked with doctors, we have the right prescription for your business needs.

Rx Pension, estate and tax planning for you and your family.

Rx Compliance with federal and state tax regulations are but a few of the services we offer.

Rx For financial success, you require liquidity, cash flow and after tax income.

Rx Proper business advice is our top priority.

Allow us to prescribe for you, the advantage of doing business with us.

For a consultation, please call

ROBERT L. FRIEDBAUER

Certified Public Accountant

127 Westminster Avenue, Bergenfield, N.J. 07621

(201) 385-0484

NOW a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE

COMPETITIVE RATES

OPEN ENROLLMENT JUNE AND DECEMBER

For More Information Contact

Donald F. Smith and Associates

Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield

STATE OF THE ART

Indications for Endoscopic Retrograde Cholangiopancreatography (ERCP)

MICHAEL B. KERNER, M.D. and
JOEL D. LEVINSON, M.D., Springfield*

ERCP provides precise diagnostic information in diseases of the upper gastrointestinal tract. It is invaluable in the diagnosis and management of disorders of the biliary tract and pancreas. With the addition of endoscopic biliary tract surgery, the therapeutic potential of ERCP will broaden.

ERCP (endoscopic retrograde cholangiopancreatography) is a combined endoscopic and radiographic procedure that utilizes a side-viewing fiberoptic endoscope to visualize the upper gastrointestinal tract, identify the papilla of Vater and, under visual control, cannulate the pancreatic or biliary duct system for retrograde injection of radiopaque contrast media. A complete examination includes endoscopy of the upper gastrointestinal tract, pancreatography, and cholangiography including the intrahepatic biliary tree. From 1968 to the present, rapid technical advances in fiberoptic endoscopes, together with evolution of technical expertise in performance, has made ERCP a brief procedure averaging fifteen to twenty minutes. Short-acting intravenous sedation is employed during the procedure. ERCP has become useful in the diagnosis and management of biliary tract and pancreatic disease.

INDICATIONS

The indications for ERCP include cholestasis, suspected pancreatic disease, gallbladder disease, postcholecystectomy syndromes, abdominal pain of uncertain etiology, and endoscopic biliary surgery for therapeutic purposes.[1]

1. Cholestasis—ERCP may be used to distinguish medical (intrahepatic) from surgical (extrahepatic) cholestasis.[1-3] Difficulties often arise in the differential diagnosis of jaundice. ERCP has been highly successful in differentiating obstructive from non-obstructive jaundice and in providing precise diagnostic information as to the site and nature of obstructing lesions. Indeed, an experienced endoscopist can find the cause of jaundice in more than 85 percent of cases.[5,6]

Fine-needle percutaneous cholangiography (PTC) is another useful diagnostic tool in the jaundiced patient. However, ERCP is more successful in demonstrating non-obstructed ducts.[7] Moreover, recent reports of PTC document higher complication rates than initially anticipated[8-11] An advantage of ERCP over PTC is the ability to identify mucosal and submucosal diseases of the gastrointestinal tract. Esophagitis, peptic ulcer, occult malignancy, esophageal varices, or periampullary neoplasms can be diagnosed on endoscopy prior to cannulation.

ERCP is particularly valuable in the seriously ill, jaundiced patient. It can be performed in elderly patients even in the face of sepsis. The procedure leaves no residual to preclude subsequent x-ray studies or surgery. The yield is greater, and the risk factor is the same or less than alternative diagnostic methods.

2. Pancreatic Disease—ERCP is highly accurate in evaluating patients with suspected pancreatic disease.[13] Retrograde pancreatography routinely opacifies the main and secondary pancreatic ducts. ERCP provides a high yield in differentiating between pancreatic inflammation and neo-

*Drs. Kerner and Levinson are Clinical Assistant Professors of Medicine, New Jersey School of Medicine, CMDNJ, Newark. Correspondence may be addressed to Dr. Kerner at 55 Morris Avenue, Springfield 07081.



Figure 1—Normal pancreatogram and cholangiogram



Figure 2—Two calculi in dilated common bile duct (large arrow). Several smaller calculi in gallbladder (small arrow). Dilated intraheptic ducts.



Figure 3—Retrieval of common duct stones using Dormia Basket following endoscopic sphincterotomy. Note Dormia Basket containing common duct stone in duodenum (arrow).

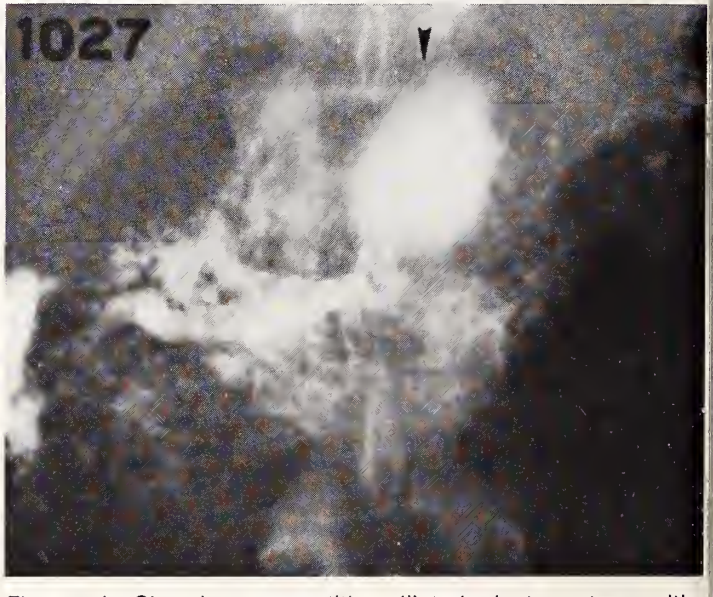


Figure 4—Chronic pancreatitis: dilated duct system with pseudocyst (arrow) in body of pancreas. Calcifications in parenchyma of pancreas.

plasia[12-14] Similarly, ERCP can delineate causes of abdominal pain or jaundice in a patient suspected of having pancreatic malignancy.[15]

The anatomy of the pancreatic duct, revealed by ERCP, is the key in the diagnosis and planned surgical therapy of patients with pancreatic inflammatory disease, and allows for postoperative assessment in patients who have undergone



Figure 5—Smooth tapered stricture of distal common duct (arrow) with proximal dilatation secondary to pancreatic inflammatory disease.



Figure 6—Carcinoma of the pancreatic head. Pancreatic duct demonstrates stenotic area (arrow) with proximal dilatation.

pancreatic surgery.[16] In recurrent pancreatitis, ERCP can detect obstructing lesions such as strictures or pseudocysts causing pain and requiring surgery.[16,17]

3. Gallbladder Disease—ERCP is often indicated in patients with known or suspected gallbladder disease. It allows evaluation of cystic duct patency as well as calculus size, position, and number. It demonstrates common bile duct stones with a higher success ratio than either IVC or operative cholangiography.[18-20] It offers the surgeon precise information regarding anatomic variations in the biliary duct system as well as information regarding occult disease of the gastrointestinal tract and pancreas.

4. Postcholecystectomy Syndrome—ERCP is especially useful in patients with persistent symptoms after cholecystectomy, if routine investigations are not diagnostic.[21] This procedure is of value in excluding common bile duct stones and pancreatic disease in these patients. It detects disorders of the stomach and duodenum as well as the presence of distal biliary sphincter stenosis. ERCP helps rule out organic disease and to avoid unnecessary repetitive biliary tract surgery.

5. Abdominal Pain—In the patient with obscure abdominal pain, ERCP is useful in demonstrating pancreatic diseases and abnormalities of the upper gastrointestinal tract not detected by ultrasonography, CAT scanning, and x-ray contrast studies.[1,2] High quality cholangiography and visualization of the gallbladder with ERCP may disclose stones not diagnosed on oral cholecystography, intravenous cholangiography (IVC), or ultrasonography. The rapid diagnostic evaluation by ERCP is particularly useful in patients with disease processes complicated by ileus, fever, or physical signs suggesting the need for surgery.[22]

6. Therapeutic Endoscopy—Therapeutic endoscopy has been introduced in the management of patients with postcholecystectomy choledocholithiasis, high-risk surgical candidates with gallbladder disease, and patients with papillary stenosis. Biliary tract cannulation permits injection of antibiotics and mechanical flushing of the ducts to relieve sepsis and remove small stones. Instruments are available for endoscopic papillotomy and sphincterotomy allowing passage or extraction of common bile duct stones and treatment of papillary stenosis. Recent reports from Germany in over 1500 cases demonstrates a high success rate (>90 percent) and a low complication rate.[23,24] Common duct stones of two centimeters in diameter can be removed. Experience in this country is similar.[25-27] With endoscopic biliary surgery, a patient may be spared transabdominal surgery, prolonged post-operative care, and convalescence.

Endoscopic papillotomy is a new, relatively safe, and highly successful procedure that has expanded ERCP to a therapeutic as well as a diagnostic modality.

7. Complications—The complications of ERCP include those of upper endoscopy as well as pancreatitis and cholangitis. The complication rate depends on the experience of the endoscopist and the underlying pathology. With increasing experience the complication rates are falling. The mortality rate in a recent series of nine thousand patients was 0.05 percent while the overall complication rate in other series ranged from 0 to 0.2 percent.[6,25] Since the complication rate in a normal ductal system is extremely low, any hazard of the procedure is proportional to its diagnostic yield.

In the patient with obscure abdominal pain, ERCP is useful in demonstrating pancreatic diseases and abnormalities of the upper gastrointestinal tract not detected by ultrasonography, CAT scanning, and x-ray contrast studies.[1,2]

The complications of ERCP include those of upper endoscopy as well as pancreatitis and cholangitis. The complication rate depends on the experience of the endoscopist and the underlying pathology.

REFERENCES

1. Kessler RE, Falkenstein DB, Clemett AR, Zimmon DS: Indications, clinical value and complications of ERCP. *Surg Gynec Obstet* 142:865-870, 1976

2. Zimmon DS: Clinical value of ERCP. *Bull NY Acad Med* 51:472-480, (April) 1975

3. Vennes JA, Jacobsen JR, Silvis SE: Endoscopic cholangiography for biliary system diagnosis. *Ann Intern Med* 80:61-64, 1974

4. Gaisford W: ERCP in the diagnosis of jaundice. *Am J Surg* 132:699-702, (December) 1976

5. Kasugai T, Kund N, *et al:* Significance and evaluation of ERCP in the diagnosis of chronic pancreatitis. Third International Congress of Gastrointestinal Endoscopy, Mexico, 1974

6. Cotton PB: ERCP: Progress report. *GUT* 18:316-341, 1977

7. Elias E, *et al:* A randomized trial of PTC with the Chiba needle vs. ERCP for bile duct visualization in jaundice. *Gastroenterol* 71:439-443, 1976

8. Moscowitz H, *et al:* Complications of "Chiba" needle transhepatic cholangiography. *Br J Radiol* 51:541-543, 1978

9. Ayre-Smith G: Fine needle cholangiography in postcholecystectomy patients. *Am J Roentgenol* 130:697-700, (April) 1978

10. Juler GL, Conray RM, Fuelleman RW: Bile leakage following PTC with the Chiba Needle. *Arch Surg* 112:954-958, (August) 1977

11. Okuda K, *et al:* Frequency of intrahepatic arteriovenous fistula as a sequelae to percutaneous needle puncture of the liver. *Gastroenterol* 74:1204-1207, 1978

12. Kruse A, Thommensen P, Frederickson P: ERCP in pancreatic cancer and chronic pancreatitis. *Scand J Gastroenterol* 13:513-517

13. Kasugai, *et al:* Endoscopic pancreatocholangiography II: the pathologic endoscopic pancreatogram. *Gastroenterol* 63:227-234, 1973

14. Rohrmann CA, Silvis SE, Vennes J: The significance of pancreatic duct obstruction in the differential diagnosis of the abnormal endoscopic retrograde pancreatogram. *Radiol* 122:311-314, (November) 1976

15. Ogoshi K, *et al:* ERCP in the evaluation of pancreatic and biliary disease. *Gastroenterol* 64:210-216, 1973

16. Mullens JE: ERCP in the diagnosis of chronic pancreatitis. *Surg* 84:308-312, 1978

17. Levine TB, Warshaw AL, Falchuk KR, Shapiro RH: Value of ERCP in the management of pancreatic ascites. *Surg* 81:360-362, 1977

18. Greenwald RA: Jaundice, choledocholithiasis, and a nondilated common duct. *JAMA* 240:1983-1984, 1978

19. Osnes M, *et al:* Comparison of ERCP and IVC in diagnosis of biliary calculi. *Lancet* 1:230, 1978

20. Hall RC, *et al:* Failure of operative cholangiography to prevent retained common duct stones. *Am J Surg* 125:51-63, 1973

21. Blumgart LH, *et al:* Diagnosis and mangement of postcholecystectomy syndromes: The place of endoscopy and retrograde cholangiopancreatography. *Br J Surg* 64:809-816, 1977

22. Safrany L, Van Husen N, Kautz G, *et al:* ERCP in surgical emergencies. *Ann Surg* 187:20-23, 1978

23. Koch H, Roch W, Shaffner O, Demling L: Endoscopic papillotomy. *Gastroenterol* 73:1393, 1977

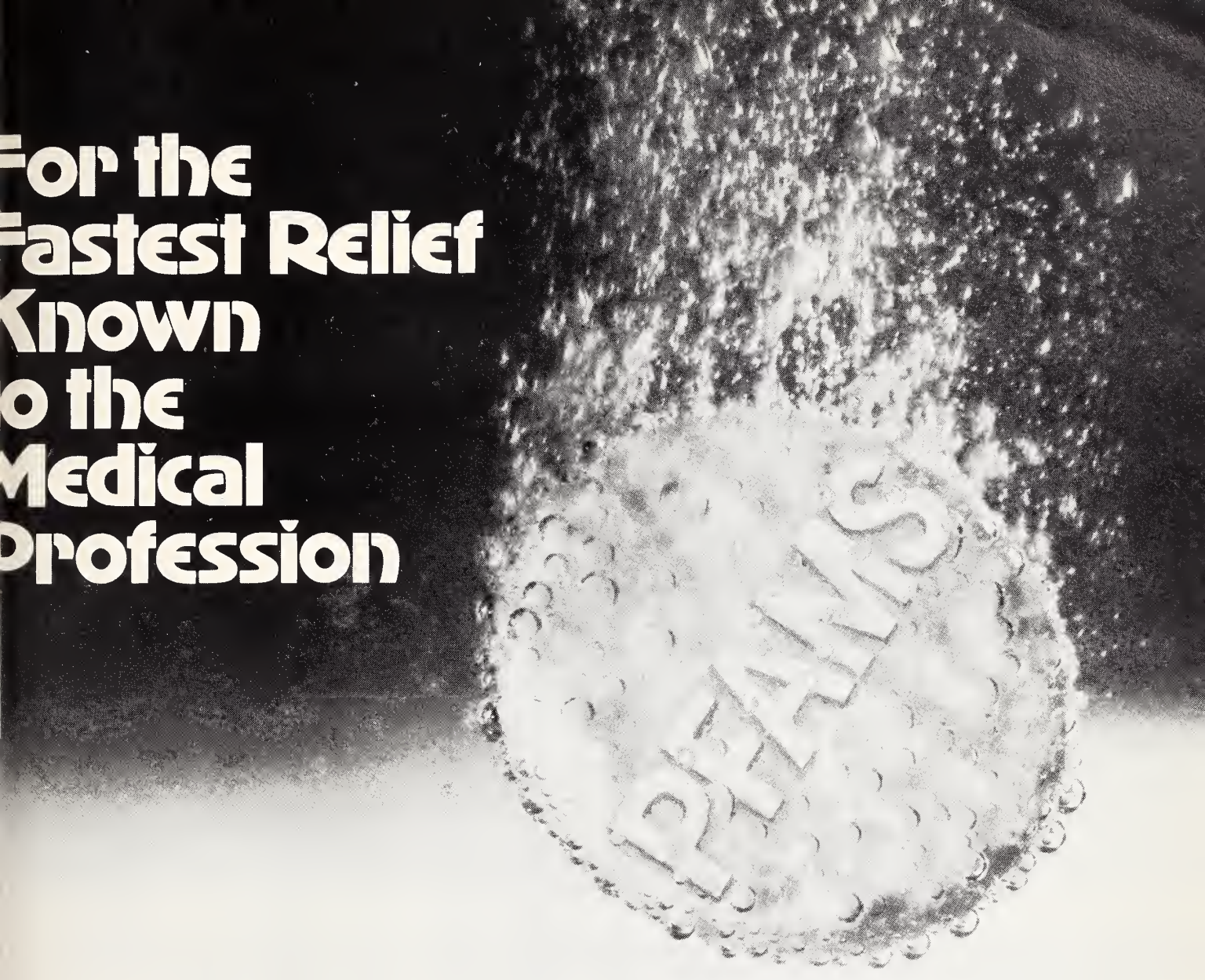
24. Safrany L: Duodenoscopic sphincterotomy and gallstone removal. *Gastroenterol* 72:338, 1977

25. Zimmon DS, *et al:* Endoscopic papillotomy for choledocholithiasis. *N Engl J Med* 293:1181, 1975

26. Zimmon DS, *et al:* Management of biliary calculi by retrograde endoscopic instrumentation (lithocenosis). *Gastrointestinal Endoscopy* 23:82, 1976

27. Zimmon DS: Personal communication

For the Fastest Relief Known to the Medical Profession



ake the most advanced medical management system in the industry:
AMS, our Patient Financial Accounting Management System. Once you
, we guarantee relief.
Complete relief. From accounts receivable that have grown far too old.
om insufficient cash flow. And from too many hours spent making too
e profit.
With PFAMS, you'll get relief from all your accounting, billing, insurance
ocessing and management headaches. And you'll get it fast.
t's the combination of ingredients that does it. You get a video display
tion and printer hook up to our powerful DEC system. You get complete
hnical training for your staff. And you get the expertise and guidance of
ople who know how to make it all work to your advantage.
For the progressive medical practice with 1 to 35 doctors, it's a unique and
mprehensive package; formulated to keep your practice financially
althy. And best of all, it's priced to be easy to take.
So call or write today. We'll tell you how to get PFAMS into your system,
ich will make you feel better in no time.

aiscorp.

Bernards Professional Center
150 North Finley Avenue
Basking Ridge, N.J. 07920
(201) 221-0900

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Foundation provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

The Foundation is supported by an in-house modern laboratory equipped to do most tests required for diagnosis and treatment. Literature on request.

1430 Second Avenue
New York, N.Y. 10021
Phone: 744-5500

GROSS & SCHARF
Financial Consultants, Ltd.

"Integrity"

HARRY S. GROSS, CPA
ALAN SCHARF, CPA

1420 WALNUT STREET
PHILADELPHIA, PA 19102

(215) 735-6120

PERSONAL FINANCIAL PLANNING

Pericardial Tamponade in Rheumatoid Arthritis*

M.P. RAVINDRA NATHAN, M.D., H. RUBENSTEIN, M.D.,
P.B. RAO, M.D. and MICHAEL SANDERS, M.D., Jersey City

A 30-year-old woman with chronic rheumatoid arthritis developed pericardial effusion and cardiac tamponade. She died following closed pericardiocentesis. Although pericarditis with effusion is not uncommon in rheumatoid arthritis, cardiac tamponade is rare. Diagnostic, therapeutic and prognostic implications of cardiac tamponade in rheumatoid arthritis are discussed here.

The reported incidence of pericarditis in patients with rheumatoid arthritis has varied from 11 to 50 percent in necropsy studies.[1-3] However, pericarditis with effusion is less commonly diagnosed clinically in such patients. Even when recognized, the condition is thought to be of no grave clinical consequences.[4,5] The purpose of this paper is to report a case of pericardial effusion and cardiac tamponade in a patient with rheumatoid arthritis in whom closed pericardiocentesis was followed by cardiac rupture and death.

CASE REPORT

In 1974, a 30-year-old Hispanic female developed symmetric polyarthritis principally affecting metacarpophalangeal and interphalangeal joints and to a lesser extent, knees, elbows, and tempero-mandibular joints. In 1976, investigations revealed a hemoglobin of 9.6 g/dl and sedimentation rate of 56 mm in the first hour. Tests for RA factor and ANA were positive, but LE cells were negative. Protein electrophoresis showed polyclonal increase in the gamma globulins. Serum complement level (C'3) was decreased. X-rays of the hands showed erosive changes in metacarpophalangeal joints. Cardiac size was normal by chest x-ray. The electrocardiogram was within normal limits.

Symptoms were controlled by salicylates and indomethacin. In 1977, the patient was hospitalized because of cough, chest pain, and progressive dyspnea. Physical examination revealed a heart rate of 105/min, BP 100/70 mm of Hg with a pulsus paradoxus of 12 mm of Hg. Jugular veins were markedly distended and Kussmaul's sign was positive. The heart sounds were of low intensity and a grade II/VI systolic murmur was heard over the precordium. An early diastolic gallop was audible. There was no pericardial rub. Electrocardiogram showed sinus tachycardia and low voltage complex. The chest x-ray revealed marked diffuse cardiomegaly with clear lung fields. An M-mode echocardiogram revealed both anterior and posterior pericardial effusion (Figure 1); the posterior fluid was demonstrable both behind the left ventricle and left atrium (Figure 2). Wide swinging movements of the entire heart were also noticeable.

Central venous pressure at this time was 14 cms of water. A few hours after admission, she became more dyspneic, restless, and tachycardic. The central venous pressure increased to 20 cm of water and blood pressure dropped to 90/70 mm of Hg. A closed pericardiocentesis was performed under electrocardiographic monitoring. Two hundred cc of serosanguinous fluid were withdrawn and the patient improved. Fifteen minutes after the pericardiocentesis, she became severely dyspneic and had a cardiac arrest. After initiating resuscitative measures, a thoracotomy was performed. A large quantity of blood was found in the pericardial sac resulting from a two cm long tear in the ventricle.

*From the Division of Cardiology, Jersey City Medical Center, Jersey City, New Jersey, 07304. Correspondence may be addressed to Dr. Nathan at the hospital.

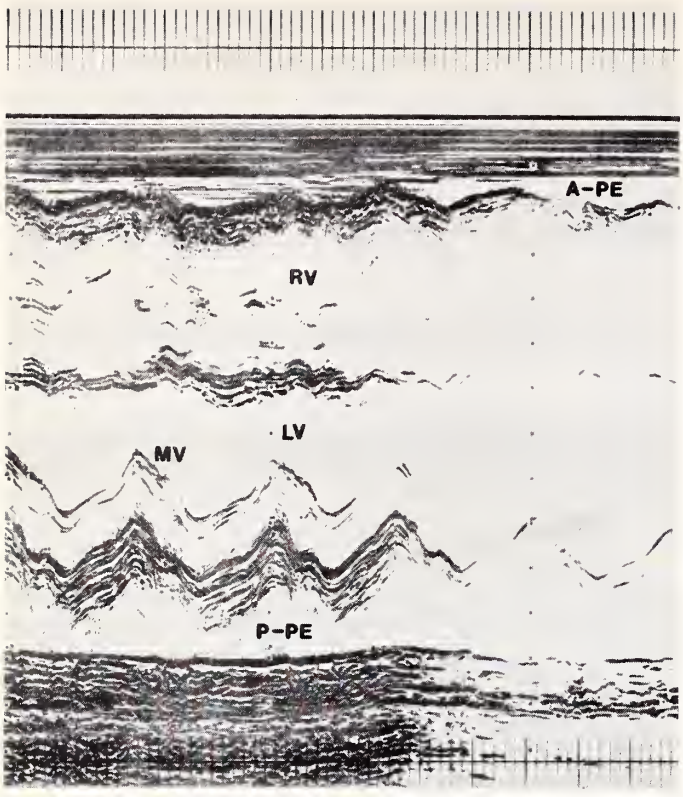


Figure 1—Echocardiogram showing both anterior and posterior pericardial effusion. A-PE = anterior pericardial effusion, RV = right ventricle. LV = left ventricle, MV = mitral valve, P-PE = posterior pericardial effusion.

Attempts to close the laceration were unsuccessful due to the friability of the surrounding myocardium. The patient expired.

DISCUSSION

That nonspecific adhesive or obliterative pericarditis in patients with rheumatoid arthritis may lead to pericardial constriction is generally well recognized.[2,3] Acute pericardial tamponade in rheumatoid arthritis, however, is rare.[7-9] With the advent of echocardiography, pericardial effusion is being recognized during life more commonly. Bacon and Gibson found pericardial effusion echographically in 50 percent of patients with chronic nodula rheumatoid arthritis and 15 percent of those with nonnodular rheumatoid arthritis.[10] Kirk and Kosh found radiographic evidence of pericardial effusion in six percent of their first 100 consecutive patients with rheumatoid arthritis.[5] This effusion is usually a transient phenomenon, which may disappear spontaneously or after treatment with steroids.[11,12]

A recent review of the literature[6] revealed 22 well-documented patients with rheumatoid pericardial effusion who developed cardiac tamponade. Treatment of rheumatoid arthritis with corticosteroids neither prevents the development of nor leads to the regression of cardiac tamponade.[6,13] Attempts at aspiration may be unrewarding and even hazardous as was seen in the patient reported here.

In a review by Thadani *et al.* all ten patients with rheumatoid arthritis and pericardial effusion who underwent pericardial resection survived but nine of the ten patients who were not operated died subsequently due to pericardial constriction.[6] Multiple loculations and adhesions are often present and closed pericardiocentesis may offer inadequate drainage of pericardial fluid. Furthermore, this procedure may traumatize the myocardium which is already friable because of fibrinoid degeneration and granulomatous inflammation.

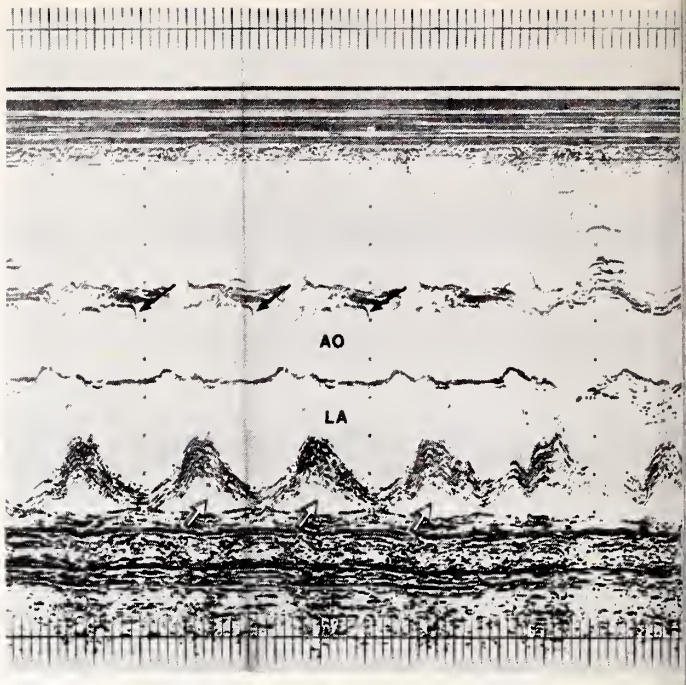


Figure 2—Echocardiogram showing pericardial fluid behind the left atrium. AO = aorta, LA = left atrium. Closed arrows indicate aortic valve and open arrows indicate pericardial fluid behind the atrium.

CONCLUSION

This case along with other reports in the literature indicate that cardiac tamponade may be a life-threatening complication in patients with rheumatoid pericarditis. Despite the seriousness of this condition, pericardiocentesis seems to be hazardous even in the presence of tamponade. The electrodardiogram taken via the aspirating needle may not reveal any ST segment elevation of injury current, probably because of myocardial fibrosis, which is not uncommon in these patients. Once cardiac tamponade is diagnosed pericardial resection appears to be the treatment of choice.

REFERENCES

1. Cruickshank B: Heart lesions in rheumatoid disease. *J Pathol Bact* 76:223, 1958.
2. Lebowitz WB: The heart in rheumatoid arthritis. A clinical and pathological study of 62 cases. *Ann Intern Med* 58: 102, 1963.
3. Bonfiglio T and Atwater E: Heart disease in patients with sero positive rheumatoid arthritis: A controlled autopsy study and review. *Arch Intern Med* 124:714, 1969.
4. Golding JR: Rheumatoid pericarditis. *Br Med J* 1:191, 1963.
5. Kirk J and Cosh J: The pericarditis of rheumatoid arthritis. *Quart J Med* 38:397, 1969.
6. Thadani U, Iveson JM and Wright V. Cardiac tamponade, constrictive pericarditis and pericardial resection in rheumatoid arthritis. *Med* 54:261, 1975.
7. Romanoff H, Rozin R and Zlotnick A: Cardiac tamponade in rheumatoid arthritis: A case report and review of the literature. *Arthr and Rheum* 13:426, 1970.
8. Stern JJ and Sobel HT Hemorrhagic rheumatoid pericarditis. *Am J Cardiol* 8:670, 1961.
9. Mathew PK. Pericardial tamponade secondary to sudden steroid withdrawal in chronic rheumatoid arthritis. *Chest* 72:532, 1977.
10. Bacon PA and Gibson DG: Cardiac involvement in rheumatoid arthritis: An echocardiographic study. *Ann Rheum Dis* 31:426, 1972.
11. Berger HW and Seckler SG: Pleural and pericardial effusions in rheumatoid disease *Ann Intern Med* 64:1291, 1966.
12. Thomas P and Hare J: A case of rheumatoid arthritis and hemopericardium. *Rheum Rehabil* 13:32, 1974.
13. Clark W, Ewy GA, Goldfein S. Stagg JF and Davis J: Rheumatoid arthritis with constrictive pericarditis and diastolic mumurs. *Ariz Med* 29:849, 1972.

Hereditary Persistence of Fetal Hemoglobin and Sickle Hemoglobin in an 85-Year-Old Man*

MUTHUKRISHNAPILLAI SHANMUGATHASA, M.D. and
SIDNEY TRUBOWITZ, M.D., East Orange

The rare chance observation of the presence of hereditary persistence of both fetal hemoglobin and hemoglobin S in an 85-year-old man confirms the benign nature of this association, despite the high concentration of hemoglobin S and absence of hemoglobin A.

The observation that fetal hemoglobin (HbF) can persist at high levels into adult life without symptoms was first made in Ghana by Edington and Lehmann in 1955[1]. Hereditary persistence of fetal hemoglobin (HPFH) in association with sickle hemoglobin (HbS) gives hemoglobin electrophoresis findings similar to HbS/β° thalassemia or homozygous sickle cell anemia; namely, absent hemoglobin A, 65 to 85 percent HbS and 15 to 35 percent HbF[2]. Despite this phenotypic expression the interaction of HPFH and HbS produces no clinical symptoms. In this report we present an 85-year-old man who was discovered to be doubly heterozygous for HPFH and HbS (HPFH/HbS) and whose life story attests to the benignity of this association.

CASE REPORT

An 85-year-old man was admitted to the hospital on July 19, 1978 with a presumptive diagnosis of carcinoma of the colon. His past history included urinary tract infection, Parkinson's disease, hypertension, and latent syphilis.

Laboratory data revealed: hemoglobin 12.2 gm/dl, hematocrit 37.2 percent, red cell count 4.41 x 10^6/mm^3, MCV 83 pl, MCH 27.9 pg, MCHC 33.2 percent, white blood cells 5.4 x 10^3/mm^3, polymorphonuclear leucocytes 52 percent, bands one percent, lymphocytes 35 percent, monocytes 5 percent, reticulocytes 0.9 percent, platelets 195,000/mm^3. Urinalysis showed a specific gravity of 1.011; pH 5 with no glucose, ketone, or protein but many white cells and bacteria.

Chemical analysis of blood revealed: total protein 6.8 gm/dl, albumin 3.3 gm/dl, calcium 8.9 mg/dl, inorganic phosphate 4.7 mg/dl, cholesterol 184 mg/dl, uric acid 10.6 mg/dl, creatinine 3.3 mg/dl, BUN 54 mg/dl, glucose 85 mg/dl, alkaline phosphatase 59 mU/ml, lactic acid dehydrogenase 127 mU/ml, SGOT 14 mU/ml, bilirubin 0.4 mg/dl, serum iron 40 mcg/dl, total iron binding capacity 207 mcg. Barium enema showed an apple core filling defect in the rectosigmoid area. Liver and spleen scan showed a normal spleen image and findings suggestive of metastases in the liver. Further investigation of the patient's intestinal problem was interrupted by his refusal to undergo any additional diagnostic procedures.

During the patient's hospital stay a routine examination of the patient's blood for a hemoglobin abnormality was performed as part of the ongoing Veterans Administration Screening and Educational Program for Sickle Cell Disease. Electrophoresis of the patient's hemoglobin on cellulose acetate at pH 8.6 revealed an absence of HbA and the presence of 60 percent HbS and 40 percent HbF—a phenotypic expression suggestive of sickle cell anemia, β° thalassemia/HbS or HPFH/HbS (figure 1). The distribution

*From the Sickle Cell Screening Program, Veterans Administration Medical Center, East Orange, New Jersey, and the New Jersey Medical School, CMDNJ, Newark. Correspondence may be addressed to Dr. Sidney Trubowitz, Chief, Hematology Section, Veterans Administration Medical Center, East Orange, NJ 07019.

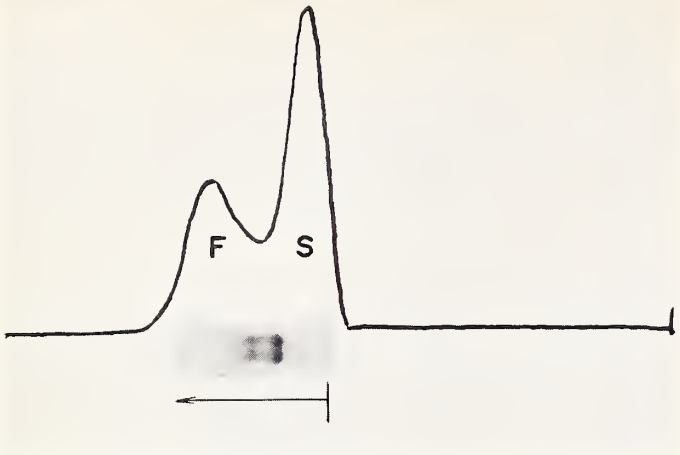


Figure 1—Electrophoresis pattern and scan of patient's hemoglobin. Approximately 60 percent S and 40 percent F. No hemoglobin A. ←——| describes origin and direction of migration.

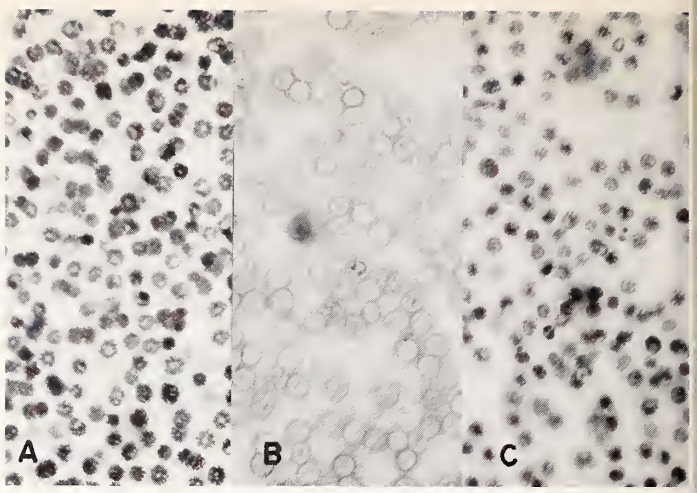


Figure 2—Results of acid elution test for HbF as applied to various samples. A—Cord Blood B—Normal Adult C—Patient Magnification—500 diameters. Note similarity of distribution of HbF in red cells of cord blood and the red cells of the patient.

of HbF in the red cells was determined by the acid elution method of Kleihauer[3] (figure 2). The complete absence of any symptoms referable to sickle cell disease and the relatively homogeneous distribution of HbF in the patient's red blood cells lent strong support to the diagnosis of HPFH/HbS.

A brother and daughter were the only surviving relatives. Their hemoglobin electrophoresis findings showed an AA and an AS pattern respectively.

DISCUSSION

Motulsky[4] estimated the gene frequency of HPFH in the American black population at 0.1 percent; the frequency of HbS at eight percent and the occurrence of HPFH/HbS at birth at 1:25,000 U.S. blacks. The black population in the U.S. according to the 1970 census, is 25,463,000[5]. Thus, the total number of individuals in the black U.S. population with HPFH/HbS should be a little over 1000 at birth. The bureau of census statistics indicates that two percent of the total U.S. population is 84 years of age or older[6]. Hence there should be approximately 25 cases of HPFH/HbS in the age group of 84 or older in the total U.S. black population. It is not surprising, therefore, that the age frequency is skewed to the younger age groups in the reported observations on HPFH/HbS[7].

Hereditary persistence of fetal hemoglobin is a heterogenous group of conditions characterized by the continued synthesis of HbF into adult life. In the black form of HPFH the heterozygotes carry from 10 to 30 percent HbF in their red cells and have no clinical abnormality[8]. In HPFH/HbS the hemoglobin pattern consists of approximately 20 to 38 percent HbF and the remainder HbS; no hemoglobin A is present. The pattern is similar to that seen in sickle cell anemia, but the patient with HPFH/HbS is free of symptoms, protected, it is believed, by the high levels of HbF more or less uniformly distributed in all of the red cells. This latter feature distinguishes HPFH/HbS from HbS/β° thalassemia and homozygous sickle cell anemia with high levels of HbF where the HbF is heterogeneously distributed throughout the red cells[8].

SUMMARY

The patient presented in this report fulfills all the criteria for HPFH/HbS. He had outlived most of his relatives and only fragmentary family studies could be undertaken. He survived a long life span with no symptoms or ill effects attributable to his high HbS concentration. As far as we have been able to ascertain he is the oldest individual reported with HPFH/HbS and supports the contention that HPFH/HbS is a benign condition that does not affect the life span or health of the carrier.

REFERENCES

1. Edington GM, Lehmann H: Expression of the sickle cell gene in Africa. *Brit Med J* 1:1308-11, 11, 1328, (letter) 1955.

2. Bunn HF, Forget BG, Ranney HM: *Hemoglobinopathies.* Philadelphia, Saunders, 1977, p. 83.

3. Kleihauer E, Braun H, Betke K: Demonstration von fetalem Hämoglobin in den Erythrocyten eines Blutausstrichs. *Klin Wochenschrift* 35:637-38, 1957.

4. Motulsky AG: Frequency of sickling disorders in U.S. blacks. *N Engl J Med* 288:31-33, 1973.

5. *World Almanac.* New York, Newspaper Enterprise Associates, 1979, p. 207.

6. *Statistic Abstracts.* Washington, D.C., Bureau of Census, Department of Commerce, 1978, p. 338.

7. Conley CL, Weatherall DJ, Richardson SN, *et al:* Hereditary persistence of fetal hemoglobin: A study of 79 affected persons in 15 Negro families in Baltimore. *Blood* 21:261-81, 1963.

8. Weatherall DJ, Clegg JB: Annotation: Hereditary persistence of fetal hemoglobin. *Brit J Haemat* 29:191-98, 1975.

9. Bertles JF: Multiple hemoglobins in cells: Significance and genetic control. In: Abramson H, Bertles JE, Wethers DL (eds) *Sickle Cell Disease.* St. Louis, Mosby, 1973, pp. 71-94.

Solitary Neurofibroma of Rib

SUSAN D. GISSER, M.D. and
EDWARD G. MOSS, M.D., Camden*

A case of solitary intramedullary neurofibroma of rib is presented. This is, to our knowledge, the second case of a truly intramedullary neural tumor to occur in a rib and the first intramedullary neurofibroma to occur in this location. The distinction between neurilemmoma and neurofibroma may be vague and lead to unnecessary confusion when dealing with a solitary tumor. These tumors occur more often in flat bones, and their radiographic features are similar to those of a variety of benign bone lesions.

Solitary intramedullary neurofibroma of the rib is rare. A patient was discovered to have such a lesion on routine chest x-ray. To our knowledge, this is the second case of a truly intramedullary neural tumor to occur in a rib and the first intramedullary neurofibroma to occur in this location.

CASE REPORT

A 36-year-old male with diabetes and hypertension went to his physician for a routine physical examination. He was asymptomatic at the time. As part of the physical examination, a chest x-ray was obtained. An expansile lesion of the left second rib was discovered (figure 1). The patient subsequently was admitted to the hospital for a biopsy of the rib. Except for minimal elevation of his blood pressure, fasting blood sugar, and uric acid, his admitting history and physical examination and laboratory values were normal. A biopsy of the rib was performed. Initial and subsequent investigations failed to disclose evidence of neurofibromatosis.

PATHOLOGIC OBSERVATIONS

The gross specimen consisted of a segment of rib obviously expanded by a 2.5 x 2.0 x 0.8 cm. firm, gray-white mass having the consistency of dense fibrous tissue. The cortical bone appeared thinned with several cracks. While the tumor appeared well circumscribed, a capsule was not demonstrable.

Microscopically, the tumor was scantily cellular with spindle-shaped cells having bent nuclei arranged haphazardly in a myxoid stroma containing a rich population of mast cells and scattered thin-walled blood vessels (figure 2). Lipophages, Verocay bodies and microcysts were not seen. Degenerate bone spicules appeared at random throughout the main tumor mass. At the periphery of the tumor, where it contacted cortical bone, there was an increase in cellularity with the presence of active fibroblasts and mononuclear inflammatory cells as well as the osteoblasts and osteoclasts associated with bone remodeling. While a portion of intercostal nerve was identified, contiguity with the tumor could not be established. Nerve bundles, as such, did not form a part of the tumor.

DISCUSSION

Solitary intramedullary neural tumors in bone are indeed rare. They account for 0.2 percent of primary bone tumors in one large series[1] and 0.7 percent of the primary benign bone tumors.[1] Most of the reported intramedullary neural tumors have been neurilemmomas, and it is considered highly unusual for a solitary neurofibroma (neurofibroma unassociated with Von Recklinghausen's disease) to occur in sites other than the skin. Some observers claim that such

*Dr. Gisser is Associate Pathologist and Dr. Moss is a radiologist at Cooper Medical Center, Camden. Correspondence may be addressed to Dr. Gisser at the Medical Center, One Cooper Plaza, Camden, NJ 08103.



Figure 1—Routine chest x-ray showing expansile lytic lesion with sclerotic margins in left second rib.

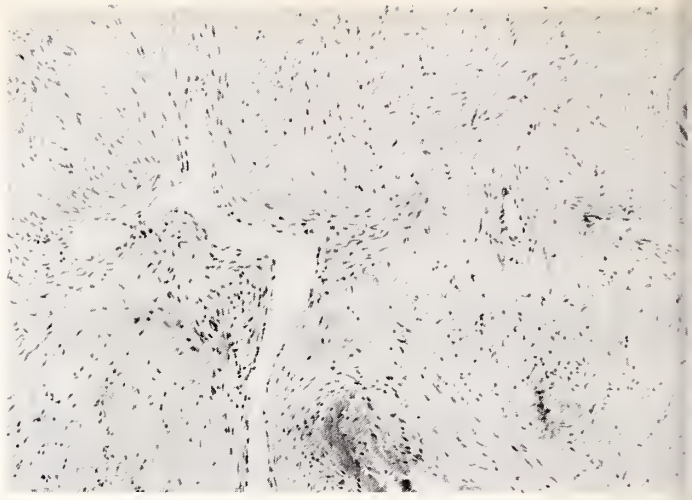


Figure 2—Photomicrograph of sparsely cellular tumor with thin-walled blood vessels and islands of degenerating bone. H & E x 100.



Figure 3—Higher power photomicrograph showing haphazard arrangement of spindle-shaped cells with bent nuclei in a myxoid, mast cell rich stroma. H & E x 430.

lesions in actuality do not occur and must represent undiagnosed neurofibromatosis.[2,3] On the other hand, truly intraosseous neural tumors, which usually are neurilemmomas, generally are not associated with neurofibromatosis.[1,4] Neurilemmomas have been found in multiple bones, with a marked predilection for flat bones over tubular bones. Two-thirds to three-quarters of them occur in flat bones, especially the mandible.[1,3,5] Almost all of the recognized solitary neurofibromas have occurred in the mandible[3], although a report of a solitary neurofibroma occurring in the clavicle recently has appeared[6].

Although the neurilemmoma and the neurofibroma have similar derivations, a histologic distinction between them frequently is made.[7] Neurilemmomas are encapsulated masses originating from nerve sheath and having histologic patterns of two types, Antoni type A and Antoni type B. The former has densely packed spindle-shaped cells oriented in bundles with overlapping nuclei forming palisades and Verocay bodies [2,3,5], while the latter has a loose and haphazard arrangement of cells with the presence of microcysts and occasional lipophages.[2,5]. Thick-walled blood vessels are frequently present.[2] Nerve fibers do not form an integral component of the neurilemmoma. Neurofibromas are unencapsulated, though circumscribed, and have a more haphazard arrangement of fibroblasts and Schwann cells[2,5] with abundant, usually alcian blue positive, stroma, and frequently abundant mast cells.[2]. Microcysts, palisading, and thickened blood vessels are not a feature, while nerve fibers in close association to or within the tumor frequently may be found.[2] Features of both neurilemmoma and neurofibroma may be found in the same mass, either when solitary[3] or when associated with neurofibromatosis[1]

Radiologically, intraosseous neural tumors present as expansile, discrete, rarefied, or punched out areas in the bone, sometimes multiloculated, with a thin rim of surrounding sclerotic bone.[1,3,5] The roentgenographic differential diagnosis includes a number of common benign bone lesions such as chondromyxoid fibroma, enchondroma, fibrous dyplasia, bone cyst, and hyperparathyroid (brown) tumor. To our knowledge, this is the second case of a solitary intramedullary neural tumor to involve a rib and the first case of a solitary predominantly neurofibromatous tumor to occur in this location. The previous neural tumor to occur in rib[8], a neurilemmoma, was small and cystic and radiologically interpreted as an intrapulmonary lesion.

COMMENT

This tumor represents a solitary neural tumor with histological features primarily of neurofibroma occurring in a rib. The Verocay bodies, thick-walled blood vessels, and microcystic change associated with neurilemmomas were absent. Encapsulation could not be satisfactorily evaluated. The tumor appeared roentgenographically similar to neural tumors of bone previously described. The bone rarefaction

To our knowledge, this is the second case of a solitary intramedullary neural tumor to involve a rib and the first case of a solitary predominantly neurofibromatous tumor to occur in this location.

corresponded to the devitalized bone spicules trapped in the expanding mass and the sclerotic margins to reactive bone formation at the periphery.

To our knowledge, this is the second solitary neural tumor and the first predominantly neurofibromatous tumor to be described occurring in the rib. In view of the known occurrence of overlapping histologic patterns and the reluctance to recognize the existence of neurofibroma in solitary form, except in the skin, it appears doubtful that a distinction between neurilemmoma and neurofibroma may be meaningful in the case of the solitary tumor. Insistence on such a distinction may be misleading. Though it must certainly be low on the list, intramedullary neural lesions do occur, and such a neural lesion should be remembered and included in the differential diagnosis of expansile lytic lesions in bone.

SUMMARY

A case of solitary intramedullary neurofibroma of rib is presented. This is, to our knowledge, the second case of a truly intramedullary neural tumor to occur in a rib and the first intramedullary neurofibroma to occur in this location. The distinction between neurilemmoma and neurofibroma may be vague and lead to unnecessary confusion when dealing with a solitary tumor. These tumors occur more often in flat bones, and their radiographic features are similar to those of a variety of benign bone lesions.

REFERENCES

1. Fawcett KJ and Dahlin DC: Neurilemmoma of bone. *Am J Clin Pathol* 47:759-766, 1967.
2. Harkin JC and Reed RJ: Tumors of the peripheral nervous system. Armed Forces Institute of Pathology, Fasicle 3, Second Series, p. 34-59, 1969.
3. Gordon EJ: Solitary intraosseous neurilemmoma of the tibia. *Clin Ortho Rel Res* 117:271-282, 1976.
4. Spjut HJ , Dorfman HD, Fechnar RE, Ackerman LV: Tumors of bone and cartilage. Armed Forces Institute of Pathology, Fasicle 5, Second Series, p. 341-345, 1971.
5. Samter TG, Vellios F, Shafer WG: Neurilemmoma of bone. *Radiol* 75:215-222, 1960.
6. Soodan VM: Intraosseous neurofibroma of the clavicle. *Acta Orthop Scand* 47:370-372, 1976.
7. Ashley DJB: Third Edition. *Evans' Histological Appearances of Tumors.* London, Churchill-Livingstone, 1978, pp. 481-486.
8. Divertie M, Dahlin DC: Neurilemmoma of rib. *Dis Chest* 44:635-637, 1963.

Infectious Hepatitis and the Guillain-Barré Syndrome

MICHAEL J. PARTNOW, M.D., Willingboro,
MICHAEL W. DEVEREAUX, M.D., Cleveland
THOMAS J. HUMPHRIES, M.D., Philadelphia*

Although the Guillain-Barré syndrome is considered to be related to viral infection, only five cases of this syndrome associated with viral hepatitis have been reported previously. We report a sixth patient who experienced both illnesses concurrently. He is only the second such patient to have had a confirmatory liver biopsy. The literature is reviewed.

The association between the Landry Guillain-Barré (LGB) syndrome and antecedent systemic illness is well accepted. However, only five cases of LGB following acute infectious hepatitis, not secondary to infectious mononucleosis, have been reported in the English literature.[1-5] Of these, only one report includes a histological description of the liver pathology.[5] The purpose of this paper is to describe a patient with biopsy-proved infectious hepatitis who subsequently developed a severe form of LGB syndrome.

CASE REPORT

A 27-year-old man was admitted to a naval medical facility with a one-week history of malaise, anorexia, nausea, vomiting, dark-colored urine, and a loss of taste for cigarettes. He denied drug abuse, recent shellfish ingestion, blood transfusions, and contact with toxins, rodents, or persons with known hepatitis. Furthermore, he was receiving no medication. On initial examination, he was afebrile, icteric, and had a tender, enlarged liver. Laboratory studies revealed a total bilirubin of 6.4 mg./dl., a direct bilirubin of 4.3 mg./dl., and a serum glutamic-oxaloacetic transaminase (SGOT) of 1760 u.

On the second hospital day, he developed circumoral numbness and distal paresthesias of all extremities. Over the next several days, he became unable to cough or swallow. This was followed by quadraparesis, incontinence, and loss of deep tendon reflexes. A lumbar puncture revealed a cerebrospinal fluid (CSF) glucose level of 70 mg./dl., a protein of 92 mg./dl., and no cells.

On the fifth day, the patient was transferred to the Philadelphia Naval Regional Medical Center. At that time, the general examination was normal with the exception of a low-grade fever, icterus, and a tender, enlarged liver. Neurologic examination revealed his mental status to be normal. Speech was nasal and reduced in volume. Extraocular motility was full. The muscles of mastication, deglutition, and facial expression were paretic. He was virtually quadraplegic with urinary incontinence and a patulous anal sphincter. The deep tendon reflexes were absent. There was decreased appreciation of pin prick over all divisions of both trigeminal nerves; however, the corneal reflexes were intact. Sensation was impaired to all modalities below T4 and absent below the knees. There was a glove-type sensory impairment over the distal third of both upper extremities.

Admission laboratory studies revealed a total bilirubin of

*From the Departments of Neurology, Rancocas Valley Hospital, Willingboro, NJ, and the University of Pennsylvania; the Neurological Institute of Columbia College of Physicians and Surgeons; and the Department of Internal Medicine (Gastroenterology), Naval Regional Medical Center, Philadelphia. Dr. Devereaux is currently at Mount Sinai Medical Center, Cleveland, Ohio; Dr. Humphries is Lieutenant Commander, MC, USN, stationed in Philadelphia. Correspondence may be addressed to Dr. Partnow at Professional Building East, Rancocas Valley Hospital, Willingboro, NJ 08046.

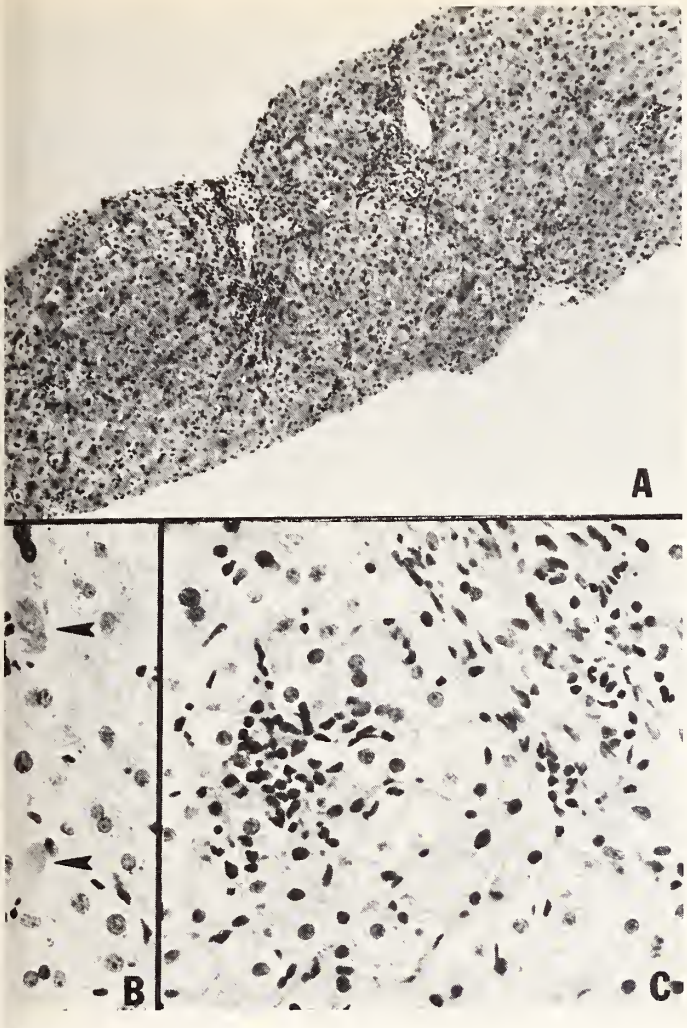


Figure 1—(A) (75X) Section of percutaneous liver biopsy demonstrating portal infiltration, extension of infiltrate into surrounding parenchyma (piecemeal necrosis), midzonal infiltrate, and generalized cellular unrest.

(B) (300X) Two examples of acidophilic bodies are illustrated (arrowheads).

(C) (300X) Higher magnification of midzonal mononuclear cell infiltrate and cellular unrest.

ll mg./dl., an indirect bilirubin of 6 mg./dl., an SGOT of 146, a serum glutamic-pyruvic transaminase (SGPT) of 1040, and an alkaline phosphatase of 251. The following studies were normal or negative: creatine phosphokinase, lactic dehydrogenase, rapid plasma reagent, heavy metal screen, antinuclear antibody, two monospot determinations, and four hepatitis-associated antigen (HAA) determinations (two by immunoelectro-osmophoresis and two by radioimmunoassay).

All liver function test results gradually returned to normal over the next three weeks. On the 18th day, lumbar puncture was repeated revealing a normal opening pressure, two lymphocytes per millimeter, a glucose of 60 mg./dl., and a protein of 310 mg./dl.

The patient's hospital course was relatively uncomplicated. A tracheostomy on the fifth hospital day was required for control of secretions. His vital capacity dropped to 300 cc. By the eighth hospital day, sensory impairment had spread to involve all dermatomes. By the 11th hospital day, sensation began to return in his hands and thighs, followed the next day by the return of his ability to shoulder shrug. By the 25th hospital day, the sensory examination was normal; and by the 27th hospital day, he could ambulate.

Because of the patient's clinical status, liver biopsy was delayed until the 45th hospital day when a percutaneous biopsy was obtained via the Menghini technique. Microscopic examination (figure 1) revealed a mild portal mononuclear cell infiltrate, scattered midzonal foci of mononuclear cells within lobules, areas of piecemeal necrosis, acidophilic bodies, and generalized cellular unrest.

Neurological examination 22 weeks after admission was normal with the exception of mild weakness of the lower extremities and absent deep tendon reflexes.

DISCUSSION

Lelong and Bernard (1935)[1] described a 14-year-old girl who developed jaundice during an epidemic of infectious hepatitis. Four weeks after the onset of the illness, a distal polyneuritis of all four limbs developed, followed by proximal progression of the deficit. An apparent full recovery ensued. There was no corroborating laboratory evidence to suggest the diagnosis of either hepatitis or LGB.

Lescher (1944)[2] reported the illness of a 28-year-old housewife who developed numbness and weakness of the fingers, followed by a progression of symptoms to the hands and forearms, and ultimately to the feet and legs. On examination, the patient was jaundiced and had hepatomegaly and severe quadraparesis with areflexia. Mild distal sensory loss was noted. The cerebrospinal fluid (CSF) was described as icteric, and no other laboratory findings were given. Six weeks after admission, the patient was no longer jaundiced. Four weeks later, her strength had improved sufficiently to permit discharge from the hospital. She subsequently recovered completely. An epidemic of infectious jaundice in her town had begun prior to the onset of her illness. As with the first report, there was no laboratory evidence to support the diagnosis of infectious hepatitis, and the CSF protein was not reported.

Rehm and Brock (1946)[3] reported a 31-year-old housewife who developed jaundice, anorexia, and malaise two weeks after the onset of an illness in her 11-year-old daughter, which was diagnosed as infectious hepatitis. Two days later the woman experienced paresthesias of the soles of her feet. In another two days, she was quadraparetic. On examination, she was jaundiced, quadraparetic, and areflexic with diminution of position sense over most joints and distal decrease of two-point discrimination. The CSF protein was 300 mg./dl. She subsequently showed further progression of her neurological deficit, including involvement of cranial nerves V, VII, IX, and XII. Ultimately she recovered fully, except for residual facial diplegia. The authors report this as the first case of LGB following infectious hepatitis.

Zimmerman and Lowry (1947)[4] described a 25-year-old paratrooper who, 20 days after the onset of anorexia, malaise, epigastric pain, and jaundice, developed pain and numbness of the fingertips bilaterally. Six days later, he was found to have distal sensory loss to all modalities over all extremities. At that time, he was areflexic. One day later, a left facial palsy and flaccid quadraparesis appeared. The CSF was normal except for a protein of 70 mg./dl. One week later, the CSF protein was 192 mg./dl. Full recovery eventually occurred.

The last such case in the literature, by Plough and Ayerle (1953)[5], involved a 42-year-old man who developed progressive quadraparesis one week prior to the onset of anorexia and jaundice. Physical examination demonstrated jaundice, bilateral facial weakness, quadraparesis, areflexia, and loss of position sense in the feet. The CSF was normal except for a protein of 99 mg./dl. A complete recovery

subsequently occurred. Three needle biopsies of the liver were performed. The first showed necrosis of liver cells, moderate diffuse inflammation in the lobules with a tendency to focalization, and moderate infiltration of the portal areas. The two subsequent biopsies were interpreted as demonstrating improvement of the active hepatitis.

The patient presented herein had findings consistent with the diagnosis of LGB. The diagnosis of infectious hepatitis is supported by the patient's symptoms, physical findings, laboratory studies, and liver biopsy. As such, he represents only the second reported case of LGB following biopsy-proved infectious hepatitis.

It is of interest that although LGB frequently is associated with an antecedent viral illness, only six cases have been reported in patients with infectious hepatitis, a common and ubiquitous viral infection.

SUMMARY

Landry Guillain-Barré (LGB) syndrome is an acute polyneuritis usually seen following a viral illness and thought to be allergic in origin. Very few cases of LGB have been reported in association with infectious hepatitis.

We report a patient with clinical features, laboratory findings, and liver biopsy results indicative of infectious hepatitis. After the onset of this illness, the patient developed the clinical features of an acute polyneuritis, culminating in areflexia, quadraplegia, facial diparesis, respiratory embarrassment, and incontinence. The CSF showed an albuminocytologic dissociation. The hepatitis cleared in three weeks. The neuropathy improved gradually over a period of months.

Only five cases of infectious hepatitis and LGB have been reported since 1935. In only one of these cases was the diagnosis supported by a liver biopsy.

REFERENCES

1. Lelong M, Bernard J: Syndrome infectieux ictero-polynevritique d' étiologie inconnue. *Bulletins et mémoires de la société de médicine de Paris* (3rd Series) 51:1749-1753, 1935.

2. Lescher F: The nervous complications of infectious hepatitis. *Br Med J* 1:554-556, 1944.

3. Rehm C, Brock W: The Guillain-Barré Syndrome—Report of a case associated with acute infectious hepatitis. *Northwest Med* 1:343-346, 1946.

4. Zimmerman H, Lowry C: Encephalomyeloradiculitis (Guillain-Barré Syndrome) as a complication of infectious hepatitis. *Ann Intern Med* 26:934-936, 1947.

5. Plough I, Ayerle R: The Guillain-Barré Syndrome associated with acute hepatitis. *N Engl J Med* 249:61-62, 1953.

"Chronic" Dermatomyositis: Response to Corticosteroids

LONNIE B. HANAUER, M.D., Millburn*

The merits of corticosteroid therapy in dermatomyositis are debated. A nine-year-old child with this disease was benefited by such treatment, despite initial absence of muscle enzyme elevations.

The merits of corticosteroid therapy in dermatomyositis are debated. It is claimed that benefits are not clear n acute disease.[1] In more chronic, smoldering disease, ndications for usage are even more debatable. This report lescribes a child with apparent chronic disease and "nor-nal" creatine phosphokinase (CPK) and aldolase who seemed to benefit dramatically.

CASE REPORT

A 9-year-old girl first was seen in August, 1976. Two years earlier, she was noted to have whitish skin lesions around the elbow. A physician diagnosed "warts" and attempted to 'burn them off with a needle." When lesions kept recurring for over a year, the child's mother saw another physician who diagnosed "psoriasis." Treatment with injections and sunlamp was also unsuccessful. The child then was seen in a local hospital clinic where weakness was noted and she was referred to me. When questioned, the mother noted progressive weakness over several months and a ten-pound weight loss.

On examination, the patient weighed 48 pounds. Blood pressure was 80/55. There was mild erythema of the eyelids, depigmentation over the dorsum of the small joints of the hands and about the knees and apparent calcinotic, draining lesions most evident around the elbows and knees. There was proximal muscle wasting and marked weakness to resistance, but active range of motion of joints was full and there were no contractures. Initial laboratory studies are shown on the table.Test for antinuclear antibodies was negative. The patient cooperated poorly for an electromyogram but the right deltoid showed "duration polyphasics and a probable full interference pattern" compatible with a myopathic process. Elbow and forearm x-rays showed soft tissue calcification (figure 1-top).

She was hospitalized in Overlook Hospital for further evaluation. Admission laboratory values are shown (Table: 9/13/76). Serum aldolase was 5 (normal 0-6). Electrocardiogram and chest x-ray were normal. Right deltoid biopsy showed "focal perivascular lymphocytic infiltrate of perimysium and endomysium with minimal myopathic changes but with increased interstitial fibrosis and . . . generalized atrophy . . . suggestive of chronic myositis."

Because the patient appeared to have marked progressive weakness along with increasing calcinosis, it was thought that she should have a trial of corticosteroid therapy despite her normal CPK and aldolase and her biopsy report of "chronic myositis." She was given 20 mg of prednisone twice daily. Laboratory changes were striking. (Table: 9/20 and 9/24/76). Appetite and general well-being improved and she was discharged on 9/25/76.

*Dr. Hanauer is Clinical Assistant Professor of Medicine, New Jersey Medical School, CMDNJ, and Chief of Rheumatology at the East Orange VA Medical Center. Correspondence may be addressed to him at 116 Millburn Avenue, Millburn, NJ 07041.

Table 1
Laboratory Values

	Hgb	WBC	Sedimentation Rate (Westergren)	CPK	SGOT	LDH
8/31/76	11.9	2970	21	36	---	---
9/13/76*	10.7	2500	17	50*	100*	345
9/20/76*	12.1	9800	6	21*	40*	235
9/24/76*		13700	5	1*	30*	180
2/7/77	12.2	3500	30	18	83	576
3/7/77	12.9	3300	14	13	82	487
6/7/77	15.2	6200	12	41	49	333
1/16/78	12.9	7500	10	42	42	188
12/18/78	12.7	6700	12	76	28	223

*The CPK and SGOT tests on 9/13, 9/20 and 9/24/76 were performed in the hospital laboratory (normal CPK is 0-190 and SGOT 20-90). The normal values for CPK were 0-125 and SGOT 1-50 for all other dates. Normal LDH is 90-275.

Over the next four months, prednisone was tapered to an every second day dose of 35 mg. Tapering was moderately rapid because of early Cushingoid changes. Muscle strength improved and there was a 13-pound weight gain. In February 1977 she began to have evening fevers. She again became leukopenic and SGOT and LDH increased. When temperature spiked to 104°F, she was readmitted.

Evaluation did not reveal an infectious cause for her fever. Prednisone was prescribed twice daily; the patient improved and was discharged. For the next few months she had occasional fever spikes while taking prednisone at 40 mg daily in divided doses. Her white blood count first returned to normal levels in June at which time her SGOT also became normal but LDH remained slightly elevated.

She has continued to improve clinically and laboratory studies have remained normal (Table). Prednisone was again given every other day beginning in June 1977 at 80 mg and tapered to 15 mg every 48 hours by early 1979. Soft tissue calcification about her right elbow has decreased significantly (Figure). Her strength is probably near normal for a 90-pound, 11-year-old. "Gym" is her favorite sixth grade activity.



Figure 1. X-rays of patient's elbows to show improvement in calcinotic lesions between August, 1976 (top) and December, 1978 (bottom).

DISCUSSION

The value of corticosteroid therapy in dermatomyositis is questioned by some.[2]. Even if thought useful in acute disease, one might question the potential value of therapy in a patient who seemed to have chronic wasting, calcinotic lesions, normal CPK and aldolase, barely elevated SGOT, and fibrosis and atrophy on muscle biopsy. The patient's clinical and laboratory response indicate that she indeed had active disease. During her first hospitalization, her CPK, although initially in a mid-normal range, fell dramatically to near zero and her SGOT and LDH, initially slightly elevated, also decreased sharply. These results seemed to indicate that her diminished muscle mass was continuing to suffer damage and to release enzymes. Her sedimentation rate also fell rapidly from a slightly elevated level to low normal. Leukopenia, which was rapidly responsive to corticosteroids with a rise to the normal range seemed to suggest immunologic suppression of her white cells. Repeated tests for antinuclear antibodies were negative. Initial tapering of her corticosteroids seemed to produce more acute disease than she had shown initially but this flareup was controlled with additional prednisone and her clinical response since has been gratifying.

SUMMARY

A nine-year-old girl suffered with draining calcinotic lesions, muscle wasting and weakness. Muscle enzymes were "normal" and biopsy suggested chronic myositis. Corticosteroid therapy resulted in dramatic laboratory changes. Tapered therapy a few months later was accompanied by fever and enzyme elevations even though these were not present when she was seen initially. Resumption of therapy has resulted in clinical improvement and normal laboratory studies.

REFERENCES

1. Winkelmann RK, Mulder DW, Lambert EH, Howard FM, Diessner GR: Course of dermatomyositis—polymyositis: Comparison of untreated and cortisone-treated patients. *Mayo Clin Proc* 43:545-556, 1968.

2. Bohan A, Peter JB: Polymyositis and dermatomyositis. *N Engl J Med* 292:344-347; 404-407, 1975.

214th Annual Meeting
Medical Society of New Jersey
May 10-13, 1980

HOUSING APPLICATION

THE MEADOWLANDS HILTON

PLEASE RESERVE: ____ SINGLE ____ DOUBLE ____ TWIN ____ SUITE

ARRIVAL: (DATE) _____ AT (TIME) _____

DEPARTURE: (DATE) _____ AT (TIME) _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

IF DOUBLE OR TWIN, NAME OF PERSON JOINING _____

Singles: $50
Doubles: $60

Executive Singles: $75
Executive Doubles: $95
Suites: $150 and up

If range of rates is offered and rate requested is not available, the next available rate will be assigned. Reservations must be received not later than two (2) weeks prior to the opening date of your meeting and will be held until 6 p.m. on day of arrival unless otherwise specified.

(New Jersey Sales Tax—5%)

Complete and mail this application directly to:

Front Office Manager
The Meadowlands Hilton
Two Harmon Plaza
Secaucus, New Jersey 07094

Confirmation will be received directly from the hotel.

A limited number of rooms also will be available at the following hotels.

For information call directly:

Saddle Brook Marriott Hotel	201-843-9500
Holiday Inn, North Bergen	201-348-3600
Holiday Inn, Lyndhurst	201-933-9800

A Case of Auto-Cholecystogram Emphysematous Cholecystitis

DONALD ROTHMAN, M.D. and
JOHN A. PARRELLA, M.D., Red Bank

On occasion, a standard abdominal film gives an instantaneous diagnosis of severe acute cholecystitis and indicates a treatment course, as in the following case.

CASE RÉSUMÉ

A sixty-eight-year-old, non-diabetic woman presented to Riverview Hospital with a history of intermittent epigastric and back pain for several days. There was marked right, upper quadrant tenderness. The white blood count was elevated and the bilirubin was normal. A radiograph in the emergency room revealed air in the gallbladder. After forty-eight hours on cephalothin sodium (Keflin®), a cholecystectomy was performed. Bile culture showed no growth. The patient was discharged eight days after surgery.



Figure 1—Plane abdominal film reveals air surrounding gallstones (autocholecystogram).



Figure 2—Ultrasound indicates multiple echoes.



Figure 3—At surgery gallbladder was markedly inflamed and necrotic.

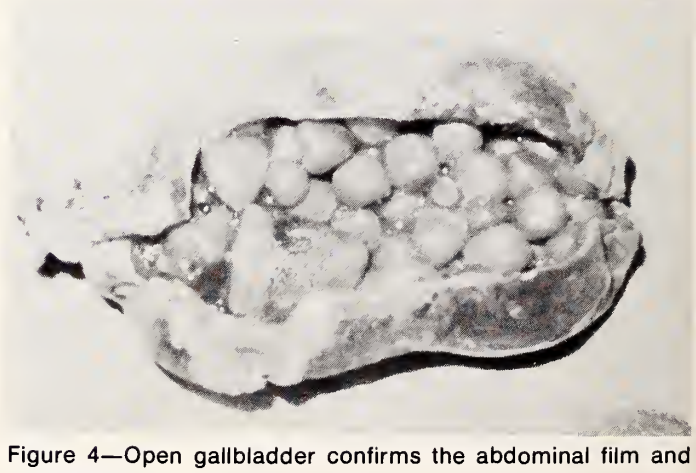


Figure 4—Open gallbladder confirms the abdominal film and sonogram.

*From the Department of Surgery and Radiology at Riverview Hospital, Red Bank, New Jersey. Dr. Rothman may be addressed at 565 Highway 35, Bridgeton, NJ 07748

Nonparoxysmal Junctional Tachycardia

EDWIN L. ROTHFELD, M.D., Newark*



Strips A through C represent a continuous recording of lead I in an 82-year-old man with clinical and chemical evidence of digitalis toxicity. There is complete atrioventricular dissociation, and the ventricular rate is slightly faster than the atrial. The P-waves are of normal contour and polarity, and the QRST complexes are also normal. This is a classic example of nonparoxysmal junctional tachycardia. (NPJT).

WHAT IS IT?

NPJT is a very common arrhythmia with important prognostic implications whose significance has been clouded by semantical difficulties. NPJT has been confusingly referred to as idionodal tachycardia, slow atrioventricular tachycardia, His bundle tachycardia and atrioventricular dissociation with interference. The intrinsic rate of pacemaker cells in the atrioventricular junction is 35 to 50 per minute. Hence, "passive" junctional rhythms with this rate emerge when there is a marked reduction in automaticity of the sinus node or when conduction defects prevent sinus impulses from traversing the junction. "Active" junctional rhythms arise when there is an abrupt increase in automaticity in these tissues, exceeding that of the sinus node, with typical rates of 150 to 240 per minute.

These rapid rhythms are referred to as paroxysmal or extrasystolic junctional tachycardias and are characterized by sudden onset and termination, rapid and regular rates and "retrograde" P-waves.

NPJT is a third form of junctional rhythm originally described by Pick and Dominguez.[1] It has an intermediate rate (70 to 110 per minute), a gradual onset and termination and P-waves of normal contour and polarity. Since its rate is similar to that of the sinus mechanism, there is frequent competition for control of the heart engendering "isorhythmic dissociation."

NPJT often is undetected even in sophisticated monitoring units because it mimics normal sinus rhythm, especially when isorhythmicity occurs, and because its rate is well within the preset limits of the monitors. When NPJT occurs, the usual alarms are not triggered because most monitoring devices are rate meters rather than genuine arrhythmia detectors.

*Dr. Rothfeld is Director of the Heart Station and of the Coronary Care Unit of Newark Beth Israel Medical Center, and Associate Professor of Medicine at New Jersey Medical School CMDNJ. He is a consultant to the editorial staffs of the *American Journal of Cardiology, and the Journal of the American College of Chest Physicians.*

CLINICAL OCCURRENCE

NPJT occurs in four clinical situations: digitalis toxicity, acute myocardial infarction (AMI), acute rheumatic or viral carditis, and as a consequence of cardiac surgery. In a recent review of digitoxic arrhythmias in our hospital, we showed that NPJT was the most common electrical manifestation of this problem[2]. Similar data relative to the frequency of NPJT in digitalis toxicity have been published by others[3,4].

NPJT also occurs commonly in AMI; Konecke and Knoebel documented this arrhythmia in 21 of 203 patients with AMI[5]. Of 13 patients with acute inferior infarction and NPJT, six died (46 percent), while seven patients with acute anterior infarction and NPJT all died in shock. One patient with NPJT and combined infarction survived. We have recently confirmed this ominous prognosis for NPJT in the setting of AMI presumably related to extensive muscle loss[6]. Earlier investigators felt that NPJT did not alter prognosis in AMI and was a relatively benign arrhythmia[1].

TREATMENT

Rational management of NPJT depends on recognition of the cause. Digitoxic NPJT is treated by withholding the drug and correcting hypokalemia, if it exists. NPJT in AMI is best managed by correcting the underlying power failure. When this arrhythmia occurs in carditis, it usually responds to anti-inflammatory agents like corticosteroids. Postoperative NPJT is usually self-limiting and requires no active treatment.

REFERENCES

1. Pick A and Dominguez P: Nonparoxysmal A-V nodal tachycardia. *Circulation* 16:1022, 1957.
2. Rothfeld EL, *et al:* Digitoxic arrhythmias: 1974. *J Med Soc NJ* 71:833, 1974.
3. Beller GA, Smith TW, Abelmann WH, Haber E and Hood WB Jr: Digitalis intoxication. *N Engl J Med* 284:989, 1971.
4. Fisch C and Knoebel SB: Recognition and therapy of digitalis toxicity. *Progr Cardiovasc Dis* 12:71, 1970.
5. Konecke LL and Knoebel SB: Nonparoxysmal junctional tachycardia complicating acute myocardial infarction. *Circulation* 45:367, 1972.
6. Rothfeld EL: Arrhythmias associated with myocardial infarction: Unresolved problems. In *Advances in the Management of Clinical Heart Disease.* Mount Kisco, NY, Futura, 1978, pp. 81-112.

NUTRITION UPDATE

Lactase Deficiency*

Albert D. Newcomer, M.D., Rochester, Minnesota

Although intolerance to milk has been recognized for centuries, only during the last 20 years has it been established that the most common cause is deficiency of intestinal lactase activity. Interest in this topic has resulted in a remarkable melding of geographers, anthropologists, enzymologists and clinicians[1].

DEVELOPMENTAL PATTERN

Lactase is a brush border enzyme found only in the small intestine. Enzyme activity begins to appear during the third month of fetal life and reaches maximal levels at term. Thus, premature infants may have a temporary deficiency of lactase. In essentially all land mammals, lactase activity decreases by approximately 90 percent at the time of weaning and in most humans, the same pattern occurs during early childhood. Thus, the aberrant pattern in man is the maintenance of high activity of lactase throughout adulthood.

These developmental changes of lactase activity in man are genetically programmed and are not controlled by the amount of lactose in the diet. This loss of lactase in early childhood, often before the age of five or six years, is determined by an autosomal recessive gene.

GEOGRAPHICAL DISTRIBUTION

An intriguing variation in the prevalance of lactase deficiency has been noted in different parts of the world among various ethnic groups. The prevalence ranges from one or two percent among Scandinavians to 99 or 100 percent among Orientals. With several exceptions, the only populations that maintain lactase are Caucasians living in northern and western Europe and their overseas descendants. Almost all other ethnic groups lose lactase activity in childhood. This means that with a high prevalence of lactase deficiency among Blacks, Orientals, Jews, American Indians, and so forth, at least 70 percent of the world's population lose lactase activity in childhood.

How has this peculiar geographic distribution of lactase deficiency arisen? Simoons[2] observed that groups who have used milk for thousands of years are also those that maintain lactase activity. He postulated that before the introduction of dairying, man followed the same developmental pattern of lactase loss as in other land mammals. With the domestication of animals between 8,000 and 4,000 B.C., man began using milk in his diet. Simoons proposes that a mutation occurred which resulted in retention of high activity of lactase throughout adulthood. This would provide a selective advantage during periods when food supply was marginal because the person could tolerate more milk. Also, the nutritional value of milk would be slightly enhanced through the normal hydrolysis of lactose. It has been estimated that if parents with high activities of lactase produced one to three percent more children each generation than did parents with lactase deficiency, the current gene distribution could have developed.

CLASSIFICATION

In addition to the "hereditary, delayed-onset lactase deficiency," there are two other causes of lactase deficiency: congenital, which is extremely rare, in which enzyme activity is diminished at birth, and secondary, resulting from damage to the small intestine. The terminology used to describe lactase deficiency is varied and confusing. The term "lactase deficiency" or "hypolactasia" is preferred to "lactose malabsorption" because the former two describe the mechanism rather than the effect. Also, lactose malabsorption is imprecise in that other gastrointestinal diseases can cause malabsorption of lactose. Deficiency does not imply an abnormal state. The use of the term "adult," as in "adult lactase deficiency" is confusing because in the vast majority of persons, enzyme loss occurs during early childhood. "Lactose intolerance" is not synonomous with "lactase deficiency." The terms "intolerance" refer to response to a defined load of lactose. For example, a person with lactase deficiency may be tolerant to one glass of milk and intolerant to two glasses.

CAUSE OF SYMPTOMS

Lactose is produced in nature only in the mammary gland of placental animals. For lactose to be absorbed, the disaccharide must first be hydrolyzed to glucose and galactose. If there is insufficient lactase activity to hydrolyze ingested lactose, the unabsorbed disaccharide remains in the lumen of the intestine and acts osmotically to retain water. Between 15 and 30 minutes after a lactose load, the person with lactase deficiency may experience symptoms of bloating, cramping and borborygmy secondary to the osmotic force of lactose within the small intestine. Later, perhaps between one and two hours, the lactose passes into the colon and is metabolized by bacteria to smaller molecules, such as carbon dioxide, hydrogen and fatty acids, which further increase the osmotic force and may cause additional bloating and cramping as well as diarrhea and flatus.

DIAGNOSIS

The definitive method for the diagnosis of lactase deficien-

*Reprinted with permission of *Contemporary Nutrition* 4:4 (April) 1979, a newsletter from the Nutrition Department of General Mills, Inc., Minneapolis.

cy involves taking a mucosal biopsy specimen from the upper portion of the small intestine by means of a swallowed capsule and then measuring the level of lactase activity in the specimen. This is rarely necessary in clinical medicine.

The most commonly used test is the lactose tolerance test in which 50 g of lactose (2g/kg in children), equivalent to one quart of milk, are taken orally and capillary plasma samples are obtained periodically. An increase in plasma glucose level of less than 20 mg/dl, associated with gastrointestinal symptoms, is strongly suggestive of lactase deficiency. However, an increase of greater than 30 mg/dl, associated with gastrointestinal symptoms, indicates normal lactase activity. By accepting an overlapping range of 20 to 30 mg/dl, most false-positive and false-negative results are eliminated.

The most accurate indirect test for lactase deficiency is the breath hydrogen test.[3] Before and after a 50 g load of lactose, breath is collected for the measurement of hydrogen concentration. In lactase deficiency, the malabsorbed lactose is metabolized to hydrogen in the colon. The hydrogen diffuses into the blood and then into the alveolar air. Because the body lacks the necessary enzymes to produce hydrogen, the gas can be produced only in the gut lumen by bacterial fermentation of nutrients, mainly carbohydrates. This process occurs primarily in the colon.

In actual practice, when suspicious of lactase deficiency, many clinicians will empirically restrict lactose in the diet for a trial period.

SIGNIFICANCE

Among the persons with lactase deficiency, the range of tolerance to lactose is extremely wide. Between 80 and 100 percent of persons with lactase deficiency are intolerant to an unphysiologic load of 50 g of lactose, which is equivalent to one quart of milk. The critical question is: "What proportion of persons with lactase deficiency are symptomatic after a physiologic load of 12 g of lactose—an equivalent to one glass of milk? Although the literature is controversial on this point, most studies have concluded that persons with lactase deficiency generally can drink one glass of milk without having significant symptoms, especially if the milk is taken with a meal, which would delay gastric emptying of lactose. For reasons that are unclear, children with lactose deficiency tend to be more tolerant of lactose than do adults with lactase deficiency. The tolerance to lactose increases after ingestion of milk for several weeks.

It is not uncommon for subjects with inherited delayed-onset lactase deficiency first to become symptomatic in adulthood, even though the enzyme loss occurs in early childhood. The reason for this delay in symptoms is not known. In some instances, a change in diet, which might include more milk as in pregnancy or in peptic ulcer treatment, brings out covert symptoms. Also, patients with lactase deficiency may become symptomatic after gastric surgery, which would result in accelerated emptying of the stomach.

There was early hope that lactase deficiency would be the cause of the irritable bowel syndrome ("spastic colon"), but in only a small percentage does lactase deficiency account for the symptoms. Even so, physicians must be aware that lactase deficiency may be the basis for nonspecific gastrointestinal symptoms, such as abdominal pain, flatulence, borborygmy, bloating and so forth.

How much nutritional value do persons with lactase deficiency gain from milk? Although much of the lactose in milk is malabsorbed in the small intestine, as much as 85 percent of the fatty acids produced in the colon by bacterial degradation of lactose are absorbed. The other two major sources of calories in milk, protein and fat, are for all practical purposes absorbed normally. There is preliminary evidence that malabsorbed lactose interferes with the absorption of calcium.[4] This effect, coupled with diminished intake of milk, could explain the increased prevalence of osteoporosis in persons with lactase deficiency.[5]

Because of the high prevalence of lactase deficiency among persons in developing countries, the wisdom of providing milk supplements to bolster inadequate diets has been challenged. However, most studies, have indicated that the majority of these people, and especially children, appear to tolerate modest amounts of milk when it is distributed throughout the day and given with meals. Nevertheless, the possibility of intolerance must be known to both the distributors of the milk and the recipients. The Committee on Nutrition of the American Academy of Pediatrics recently concluded that "on the basis of present evidence it would be inappropriate to discourage supplemental milk feeding programs targeted at children on the basis of primary lactose intolerance.[6]

TREATMEMT

Treatment requires that lactose be restricted to the tolerance level. This does not mean total elimination of lactose from the diet. Lactose-hydrolyzed milk can be produced by incubating milk with lactase generally derived from yeast. Also, fermented milk products, such as cheese in which lactose has been removed or metabolized, can be used. Based on equivalent protein servings, yogurt has 75 percent as much lactose as regular milk, cottage cheese 14 percent and aged cheddar cheese 6 percent.

SUMMARY

Lactase deficiency may be congenital, secondary to disease of the small intestine, or inherited as an autosomal recessive trait and appear in early childhood. Inherited, delayed-onset lactase deficiency is the normal pattern in land mammals and most humans. Thus, the aberrant pattern in man is the maintenance of lactase activity throughout adulthood, which is found among Caucasians in northern and western Europe and in several other scattered population groups. Most persons with lactase deficiency appear to tolerate physiologic amounts of milk (one-half to one glass) without having significant gastrointestinal symptoms, especially if the milk is taken with a meal. For those who are symptomatic, lactose-hydrolyzed milk and fermented milk products are well tolerated.

REFERENCES

1. Ransome-Kuti O: Lactose intolerance—A review. *Postgrad Med J* 53 Suppl 2:73-83, 1977.

2. Simoons FJ. The geographic hypothesis and lactose malabsorption: A weighing of the evidence. *Am J Dig Dis* 23:963-980, 1978.

3. Newcomer AD, McGill DB, Thomas PJ, Hofmann AF: Prospective comparison of indirect methods for detecting lactase deficiency.*N Engl J Med* 293:1232-1236, 1975.

4. Debongnie JC, Newcomer AD, McGill DB, Phillips SF: Absorption of nutrients in lactase deficiency. *Am J Dig Dis* (in press).

5. Newcomer AD, Hodgson SF, McGill DB, Thomas PJ: Lactase deficiency: Prevalence in osteoporosis. *Ann Intern Med* 89:218-220, 1978.

6. Committee on Nutrition: The Practical Significance of Lactose Intolerance in Children. *Pediatr* 62:240-245, 1978.

Cambodia

THE HONORABLE MILLICENT FENWICK, Washington, D.C.*

Cambodia, in the autumn of 1979, presented an all-too-vivid picture of the best and worst of human capabilities—the worst, because it shows the terrible force of an unbridled lust for power; the best, because it provokes a very beautiful expression of the human will to help and to heal.

In the capital of Cambodia, Phnom Penh, sits a puppet government put in power and kept there by an invading Vietnamese army of 200,000 men. The people are starving, but the government will accept donated food only if it can control the distribution. The army is in the rice fields, burning the peasants' food, forcing hundreds of thousands as refugees across the Thailand border. Poison gas—nerve gas and hemorrhagic gas—has been used for two years by the Vietnamese army in Laos and now there are rumors of its use in Cambodia, too. It is dropped in canisters by Russian MIGS—not sprayed.

Meanwhile, holed up in the western Cardamon Mountains is the remnant of the followers of the previous despot, Pol Pot, a communist agrarian fanatic who set out to destroy every vestige of modern industrialization when he took power in 1975. He killed every educated person he could find, destroyed churches and factories, drove city-dwellers into the countryside.

As a result of this thirst for control of the country it is estimated that as many as two or three million Cambodians may have died. Over 300,000 refugees are in camps along the Thai border and perhaps 300,000 more may be coming if the expected Vietnamese offensive is launched this winter. So much for the dark side of the picture.

On the other side, there are the refugee camps in Thailand —Sakeo Camp, to take one example of the eighteen. Here, in the midst of a flat, treeless plain, in 100° heat, there is a cluster of 37,000 people with no water except what can be trucked in, no sanitation, no buildings. Shelter means a plastic sheet stretched over supporting poles, or—in the hospital shelters—a thatched roof. And here the volunteers work, taking care of the sick, feeding the starving, drenched in sweat and breathing the terrible stench, day after day. They never know how many more famished people will come dribbling into the camp in the next twenty-four hours, sick with pneumonia, malaria, tuberculosis or—most dreaded of all—meningitis.

The medical conditions are chaotic. In Sakeo Camp, a newly-arrived team of volunteer doctors from Israel had just arrived, luckily bringing with them blood-typing equipment. This immediately saved the life of one little girl with Type B blood, a doctor from North Carolina told me, because he knew he, too, had Type B and could give her a transfusion. Many of the refugees, particularly the children, are too debilitated to accept and digest food and have to be fed intravenously. Many have skin diseases and sit listlessly, two or three to a mat, daubed with white ointment as though for some macabre Halloween. Deaths in the camp were forty a day, but had fallen to seven or eight by the time I was there.

A new danger threatened, however. Adler, the head of the Israeli group, told me that he had had the first four meningitis cases the day before, with two deaths, and that five more cases had been diagnosed. He feared the beginning of an epidemic which could sweep through the camp like wildfire.

The volunteers go out among the people trying to get the sick to come to the hospital sheds, but the people are so dehumanized that they scarcely recognize death, much less illness. One mother did come to the doctors asking for help for the child in her arms—the last of her four sons, she said —and when the doctor told her the child was dead, her expression never changed.

The feeding is done by the Catholic Relief Services, Church World Service and other such voluntary organizations. Rice is the staple, its protein content augmented by dry powdered milk. They try to get some fish and fruit, especially for the children, but it's not easy. The effect of such severe and prolonged malnutrition on very small children is said by many doctors to present the danger of a life of mental retardation for those who survive.

I am not competent, of course, to write an article on a medical subject for a medical publication or to judge the situation accurately, but perhaps some of the details observed in that short visit may be helpful to those who are. In any case, I am sure that all would share in feeling that those who serve in those camps are exhibiting some of the finest traits of the human character—sacrifice, self-discipline, compassion and a driving desire to heal disease and relieve suffering. One volunteer, her boss told me, had worked ten months with only five days off. It is hard to see people in such appalling conditions knowing that they were victims not of a natural disaster, but of human cruelty and greed. On the other hand, it is inspiring to see to what heights of goodness human beings can rise.

*Congresswoman from the 5th District, New Jersey. She is a member of the Congressional Committee on Foreign Affairs, the subcommittees on Europe and the Middle East, Africa, and the Committee on the District of Columbia, and may be addressed at 1212 Longworth House Office Building, Washington, D.C. 20515.

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

DOCTORS' NOTEBOOK

Trustees' Minutes December 16, 1979

A regular meeting of the Board of Trustees was held on Sunday, December 16, 1979, at the Executive Offices, Lawrenceville. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Degree Designation on License/ Osteopathic Association . . . Authorized the President to appoint an ad hoc committee to meet on an emergency basis to address the problems involved in the degree designation of those licensed by the State Board of Medical Examiners to practice medicine and surgery in New Jersey, especially as it pertains to osteopaths, and report at the January meeting of the Board.

A proposed regulation of the State Board of Medical Examiners to use the designation "physician and surgeon" or "licensed to practice medicine and surgery" has been withdrawn. The Osteopathic Association maintains that osteopaths are different and favors keeping degree designations. Some osteopaths, members of MSNJ, who are board certified in their specialties and have staff privileges in AMA-approved hospitals, feel they should have the right to use the designation M.D. The first graduating class of the CMDNJ School of Osteopathy (1981) will reflect exactly the same curriculum as that of CMDNJ's two allopathic medical schools.

Health Care in Jails . . . Directed that a communication be sent to the AMA Jail Project Committee recommending that New Jersey be included in the experimental, jail-study program to improve medical care in correctional institutions.

Health Service Administration (HSA) Activities . . . Referred the matter of financing and support of HSA bird-dogging organizations to the Council on Medical Services for review and report.

DRG Program . . . Approved the action of the Executive Committees of the New Jersey Hospital Association and MSNJ in agreeing that the administrative staffs of both organizations work together to develop a program (to be initiated in the 26 hospitals mandated to employ the DRG system) to inform New Jersey physicians about the DRG program and how it affects the practice of medicine.

1979 Membership . . Noted that total MSNJ membership for 1979 was 9,306; AMA membership was 5,583.

1980 Membership . . . Noted that as of December 6, 1979, 1980 membership was 504; dues-incentive rebates had been made to Camden and Essex County Medical Societies.

Medical Society Representatives on Governing Bodies of Open Panel Insurance Programs . . . Directed that no officer or staff member of MSNJ should sit on the board of Blue Shield as a representative of the Medical Society of New Jersey.

Note: The above action was precipitated as a consequence of a proposal from the Federal Trade Commission staff that the Commission initiate a rule to preclude medical societies and organizations from having a designated or ex-officio representative on governing bodies of open panel insurance programs, HMO's, and the like.

Board of Medical Examiners' Hearing Mechanism . . Noted that the decision of MSNJ to recommend elimination of the "informal" hearing employed by the State Board of Medical Examiners would be studied and a viable alternative to the informal hearings pursued, and that the subject would be included for discussion at a meeting with a representative of the Division of Consumer Affairs.

Joint Practices Committee with New Jersey State Nurses Association . . . Received a report on the meeting of the Joint Practices Committee with the New Jersey State Nurses Association which noted that the Nurses Association had withdrawn support of the "1985 proposal" that would require (at the entry level) a bachelor of science degree to practice nursing in New Jersey; that both physicians and nurses have concerns regarding HSAs, PAs and DRGs and share agreements about each; that the National Joint Practice Commission is sponsoring a hospital demonstration project which brings nurses and physicians together in rural and urban settings in a program of integrated record, 24-hour primary nursing care and the team approach to medical care.

Board of Medical Examiners . . . Received as informative a report from William Greifinger, M.D., on his attendance at the November 14th meeting of the State Board of Medical Examiners.

Health Care Administration Board . . . Received as informative a report from Daniel J. O'Regan, M.D., on his attendance at the December 6th meeting of the Health Care Administration Board.

State HMO Advisory Committee . . . Received a report from the State HMO Advisory Committee which noted that the Committee had considered a certificate of need application from Crossroads Health Plan for expansion of its HMO facility into Ocean and Burlington Counties, and had reviewed certificate of need and certificate of authority applications from the Health Insurance Plan of Greater New York for takeover of the bankrupt Group Health Plan in Hudson County. The new corporation, HIP of Greater New Jersey, will begin operation on February 1, 1980. HIP representatives denied plans for establishing satellites in surrounding Essex and Passaic Counties.

AMA Interim Meeting . . . Noted that a report of the AMA Delegation on the Interim Meeting of the AMA House of Delegates held in Honolulu in December (1979) will be supplied to the Board at the January meeting.

Division of Medical Assistance ... Tabled discussion on the resolution presented to the Board of Trustees (11/11/79) relative to investigative procedures of the Division of Medical Assistance and Health Services, pending the appearance of the Chairman or a representative of the Committee on Medicaid.

Insurance Benefits for Psychiatric Care ... Referred back to the original committee (Drs. Bernstein and Morrison), for further consideration, the entire matter of insurance benefits for psychiatric care, including the recommendations of the New Jersey Psychiatric Association, with the suggestion that the President expand the Committee's composition to include independent observers and representatives from the New Jersey Psychiatric Association.

Multiphasic Screening Centers (NJAC 13:35-6.14) ... Accepted the following interpretation of the State Board of Medical Examiners concerning the legal and moral responsibilities of a physician who was not actively treating a patient who gratuitously had directed a laboratory report be sent to that physician:

> The obligation of a physician to contact a patient who gratuitously has directed a laboratory report to be sent to that physician, applies only to patients who are currently under treatment with that physician. Clearly there is no obligation to contact persons not current patients, particularly since it was at the former patient's own initiative that the doctor was contacted, and there is thus no direct contractual relationship between them at this time. However, the physician always retains discretion to review such a gratuitously sent report and to determine to make contact with the patient as a matter of professional ethics of that practitioner.

Specialty Society Representatives in House of Delegates ... Received a communication from the New Jersey Neurosurgical Society indicating its general consensus was that a county delegate designated to represent his specialty society would be functioning under a conflict of interest to represent his county society in accordance with instructions from the members of that county, and that the Neurosurgical Society would not, therefore, designate a particular member of the House to represent its views. Other specialty representatives present voiced the same thought.

New Jersey State Safety Council ... Authorized a financial commitment of $140 for the next three years to the 1980-1981-1982 Triennial Fund of the New Jersey State Safety Council.

A New Jersey Law—Scoliosis School Screening*

A group of orthopedic surgeons, with the support of the Scoliosis Research Society, worked diligently for scoliosis legislation, which finally was passed in August 1978. Thus, New Jersey preceded many other states in mandating scoliosis screening by school personnel of school children between the ages of ten and eighteen.

The New Jersey Orthopedic Society promptly created a Scoliosis Screening Committee† to organize, instruct and guide this screening program. This committee is working in close cooperation with the Departments of Health and Education in the State. Since much controversy has arisen over this mandatory scoliosis screening in the schools, the committee feels there are several matters which need clarification and explanation.

Scoliosis most frequently is discovered and noted to progress in children in the growing years. As all of the children between the ages of ten and eighteen are of school age, it is logical that scoliosis screening should be done in the school systems. Screening has been made mandatory because this condition occurs in ten percent of children.

Through early detection and close observation, it is possible to treat these children with a variety of braces. If undetected, scoliosis can progress in severity. Undetected scoliosis ultimately may result in a deformity which is unsightly and may affect the cardiovascular and respiratory systems, causing a threat to life expectancy. Aggressive surgery may be required, but our goal is to eliminate the need for costly and extensive surgery and to prevent unsightly deformities by detecting scoliosis earlier. If we wait to see if these children will "outgrow the curve," we are jeopardizing their health for very few curvatures spontaneously correct while most increase in severity. One cannot predict the long-term result.

The program informs parents that scoliosis screening will be performed in their school system by school physicians, school nurses and physical education teachers. After the screening, a letter will be sent to the parents of positive screenees; it advises them that there were some physical findings in their child's spine and recommends the child be evaluated by his primary care physician.

The primary care physician will confirm or not confirm these findings. He may request a standing x-ray on a 14 x 17 film of the entire spine to include all of the thoracic and lumbar spine, specifically from the iliac crests up. In the case of a kyphosis, a standing lateral x-ray of the thoracic spine is indicated.

If a positive finding is confirmed by x-ray the primary care physician may wish to refer his patient to the care of an orthopedic surgeon who will decide whether or not a full set of scoliosis x-rays is indicated and whether treatment is indicated. Broad guidelines suggest that curves below 20 degrees require periodic reexamination. Curves between 20 and 40 to 45 degrees require a Milwaukee brace, while curves above 40 to 45 degrees probably will require surgery. The orthopedic surgeon will report his findings and his treatment plan to the primary physician and to the school authorities.

The school systems will compile the findings and the statistics for the New Jersey Department of Education. This information will provide epidemiologic data on scoliosis, an evaluation of treatment, and followup on positive screenees.

The committee is anticipating confusion, incertitude and trepidation among the school personnel involved in scoliosis screening. Through lectures and training programs, school personnel will become more confident and the screening will become routine.

The members of this committee and any other orthopedic surgeon who is concerned with the program are available to the schools for guidance, advice, instruction and directions. There is no fee for this help. We will be glad to lecture to school nurses, parents, physicians, childrens' agencies or others who need our help. The Scoliosis Screening Committee has divided the State into areas where a member of our committee,

*This item was prepared by Marcel J. Schulmann, M.D., Chairman of the Scoliosis Screening Committee of the New Jersey Orthopedic Society. He may be addressed at 4 Lumberton Rd., Suite 6, Mount Holly, N.J. 08060.

†In addition to Dr. Schulman members of the committee are: Mark Feierstein, M.D., 303 George Street, New Brunswick, New Jersey 08901; Robert Fernand, M.D., 197 Hamburg Turnpike, Wayne, New Jersey 07470; Stuart Hirsch, M.D., 720 U.S. Highway 202-206, Bridgewater, New Jersey 08807; Sam Laufer, M.D., 279 Third Avenue, Long Branch, New Jersey 07740; Charles Nadel, M.D. and Robert Weierman, M.D., 986 Sanford Avenue, Irvington, New Jersey 07111; Martin Sorger, M.D., 200 Highland Avenue, Glen Ridge, New Jersey 07028.

or a concerned orthopedist, easily can be contacted. If assistance is needed, one simply may contact the chairman of the committee.

Some physicians may not understand the problem and may reject the program, however, it is hoped, through continuing medical education and more articles, such as this one, we will gain the support of all physicians in the State. We feel that screening for scoliosis in the schools is a good form of preventive health care and education. It is our hope that scoliosis will be controlled and the severe problems encountered through lack of diagnosis will be minimized through the school screening program.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

The December 14, 1979 issue of *American Medical News* reported that the AMA House of Delegates asked the AMA to study and to evaluate the diagnostically related group project being used as a hospital reimbursement concept in New Jersey. The delegates also asked that a report on this project, and its potential impact on patient care, hospital finances, and the practice of medicine be submitted at the 1980 Annual Meeting. As this is written, the Department of Health has not announced whether the waiver from the Health Care Financing Administration has been received. Such a waiver is necessary for the inclusion of Medicare and Medicaid patients in the first group of twenty-six (26) hospitals which were due to initiate the prospective rate-setting system as of January 1, 1980.

As reported previously in this space, the DRG system may be the most important and controversial new concept to involve medical care in this State. Given the interest of HEW, it is expected that the HCFA waiver will be granted. Many eyes are focused on New Jersey as the new program of cost and quality control begins. The resolution referred to above was submitted to the AMA House by our own New Jersey Delegation, and it is gratifying that it was adopted.

The potential impact on patient care, hospital finances, and the practice of medicine cannot be estimated at present. Therefore, careful surveillance by all parties is mandatory. The New Jersey Hospital Association and all third party payers have primary interest, since any changes in hospital reimbursement will affect the cash flow of individual institutions, and the method of reimbursement by the insurance carriers. Since the requirements for documentation of hospital care will form the basis for DRG designation and payment, the hospital chart and face sheet will need to be accurate. The attending physician will be responsible for this.

The relationships between the DRG project and our eight (8) PSROs will need to be defined. There are eight (8) sets of PSRO norms, criteria, and standards. How will these be brought into conformity with the DRG system? The PSRO utilization review system is well-established. How will this utilization review (UR) system, based on length of stay, be compatible with a diagnosis-based method? If PSRO personnel participate in reviewing all hospitalized patients, how will they be reimbursed for the non-federal portion of the work? A subcommittee of the New Jersey Professional Standards Review Council (of which the New Jersey Foundation for Health Care Evaluation is the operating arm) has been addressing these issues. The Executive Directors of the New Jersey PSROs are doing likewise. Some proposal probably will be submitted to the Health Care Administration Board, to start the regulatory process on DRG/PSRO relations. Some type of agreement will be developed between the Department of Health and each PSRO. HCFA and HSQB (Health Standards and Quality Bureau, which oversees PSROs) are encouraging PSROs to develop working agreements with the Department of Health.

Regarding quality issues, the Commissioner of Health has agreed that problems in this area will be referred to the appropriate PSRO for professional peer review. The Commissioner's Physician Advisory Committee, with participation of MSNJ, NJAOPS, and NJFHCE physicians, has been looking at screening criteria for quality review for many of the DRGs.

Implications may stretch further down the line, if the DRG program develops as planned (and that is by no means clear). Dr. Bruce Vladeck is the Assistant Commissioner of the New Jersey Department of Health for Planning and Resources Development. His office has developed most of the methodology for the DRG program. The planning and resources development aspects of his responsibility also include many aspects of the Health Systems Agencies (HSAS) and their operations. It is possible that information developed by the DRG data system may be used for regionalization of services, allocation of training programs, and other projects that could have a profound effect on how medical services are delivered in this State.

No predictions can be made. No one should jump to conclusions on any aspect of this project. NJFHCE, along with MSNJ, consistently has taken this attitude. We should advise the planners and regulators on what is in the best interest of our patients. We should wait and analyze the results as the initial hospital group becomes involved. We should reserve judgment on the eventual usefulness of this program.

Dr. Alessi and our New Jersey Delegation should be congratulated for bringing this important issue to the AMA House of Delegates. The concurrence of the AMA is right and proper.

CMDNJ Notes*

Stanley S. Bergen, Jr., M.D.
President

(I have asked Richard C. Reynolds, M.D., Dean of the CMDNJ-Rutgers Medical School to serve as guest editor of CMDNJ Notes. Dr. Reynolds has selected as his topic, "The Narrowing Gap Between Practicing and Academic Physicians," a subject of nationwide as well as statewide importance. The following is the first of his two-part article.)

THE NARROWING GAP BETWEEN PRACTICING AND ACADEMIC PHYSICIANS

In view of the strengthening of ties between the CMDNJ-Rutgers Medical School and its major affiliated teaching facility, Middlesex General Hospital in New Brunswick, it is important that all physicians are aware of, and have a better understanding of, the narrowing gap between practicing and academic physicians.

Habits and traditions reinforce our belief that each group of physicians has different missions, ambitions and constituencies. We continue to hear references to town-gown strife indicating ongoing contention between those doctors who have selected a professional life in community practice and those physicians who prefer an academic setting.

It is my thesis that this gap is narrowing because of major political and social events that have impinged upon the ac-

tivities of both groups. Today, the practice of medicine by physicians and the teaching of medical students by physicians and basic scientists are under greater public scrutiny and accountability than ever before.

As we enter the 1980's—and as CMDNJ begins its second decade, incidentally—the professional actions of both groups of physicians are being reviewed by federal, state and local agencies spawned by legislatures which represent a public disenchanted by and disillusioned with health care. A good segment of the public is perplexed that the large sum of money provided for biomedical research activity has not yielded cures for heart disease and cancer. The public also is concerned that medical education is too expensive and oriented too much toward specialization.

Since 1959, when I finished my training in internal medicine and service obligations, I have spent nearly equal time in a small community in the practice of medicine, and, as a full-time faculty member of a medical school. Both the practicing and academic experiences have represented equal and major commitments—a total immersion into the milieu of each part of the profession.

The practicing physician sees himself as the first line of medical care. He bears the brunt and responsibility for the delivery of health care to the majority of citizens in this country. He works long hours; he earns a good income; and he is committed to improving medical services in his locality. He receives the praise of his patients and an envied position in his community. He even quietly makes house calls for a few favored patients of long standing. Although the community physician is a specialist 85 percent of the time, he provides general medical care to many of his patients.

The doctor in practice is not always aware, however, of the health problems of the patients he and his colleagues do not treat. He is surprised by the frequency and rancor of malpractice suits. He is frustrated by the unceasing impact of governmental agencies in his everyday office practice and hospital activity. He contributes to medical audit, or utilization, or grievance, or committees that unselfishly try to upgrade medical care. He is appalled that he has to justify to the local, regional and state HSA's the addition of three beds to the coronary care unit or the replacement of antiquated x-ray equipment in the local hospital.

During the past 25 years there has been a rapid expansion in medical student education. Nearly 50 new medical schools have been established, including the three medical schools of CMDNJ, in addition to the original 75 that existed when I was graduated from medical school in 1953. Although this has resulted in a doubling of the number of medical students graduating each year from 7,500 to 16,000, there has been an even more impressive growth of medical school faculty. Major factors in the growth of medical schools are the increase in the country's population, along with a conviction in the early 60's that there were not enough doctors in the United States to meet the medical care needs of its citizens.

Equally important was the belief nurtured during the late 40's that the quickest way to the eventual relief of human misery was through biomedical research. This belief was sanctioned by liberal grants from the federal government, particularly the National Institutes of Health, which made it possible to train and recruit many additional medical school faculty oriented toward research. When I was a student at Johns Hopkins the number of full-time faculty in the Department of Medicine could be counted on the fingers of both hands. Not too many years later the department had more than 100 full-time faculty members.

Unquestionably the emphasis on biomedical research in medical schools influenced the education of medical students and residents and became one of the factors leading to almost routine specialization of medical school graduates during the 1960's.

Academic faculty, who were beneficiaries of research awards, traveled from one meeting to another and consulted with colleagues throughout the country. The result was that academic physicians developed a national perspective and a national constituency not of patients but of professional peers who showed interest and enthusiasm in the same medical discipline. With expanding size and numbers of medical schools, faculty moved frequently from one institution to another seeking better laboratories, larger salaries, and less teaching and clinical responsibilities so they could devote more time to research.

During the 1970's, however, academic physicians have seen a shriveling of grant money for research and have had to become more dependent on patient-fee income which requires more time for patient care and less for teaching and research. Like his counterpart in practice, the academic physician is also beleaguered with the problem of professional accountability. If he is a member of a state medical school he has to show how he spends his work week, identifying the hours dedicated to teaching, to research, to patient care, and to administration. In New Jersey this year, the Department of Higher Education requested from the medical schools the National Board scores for the last three classes of medical students. The department's staff wanted to assess student performance as one manner of measuring faculty performance.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Stanley Goldstein, M.D., 1525 Millerspost Highway, Williamsville, NY 14221. New York Medical 1975. Sub-specialty, pediatrics. Board eligible (pediatrics) Solo, partnership, research. Available July 1980.

Prasad Srinivasan, M.D., 2951 S. King Drive, Apt. 1808, Chicago, IL 60616. Baroda (India) 1972. Special interests, immunology, pediatrics. Board certified (pediatrics). Partnership, single or multi-specialty group. Available July 1980.

Dfraim Lavi, M.D., 8320 SW 65th Avenue, Apt. 12, Miami, FL 33143. Sackler (Israel) 1975. Partnership, single or multi-specialty group. Available July 1980.

ANESTHESIOLOGY—Subhash Chander, M.D., 264-16 74th Avenue, Glen Oaks, New York 11004. Government College, Punjab (India) 1972. Solo, single-specialty group, institutional. Available July 1980.

Chung B. Park, M.D., 1925 Eastchester Road, Apt. 22-C, Bronx, NY 10461. Kyungpook (Korea) 1971. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Abhijit Desai, M.D., 435 E. 70th Street, Apt. 21-C, New York, NY 10021. Seth G.S. Medical (India) 1973. Board eligible. Partnership, single-specialty group, institutional. Available July 1980.

Dhan Raj, M.D., 308 North Hite, Apt. 10, Louisville, KY 40206. Osmania (India) 1973. Solo, partnership, multi-specialty group. Available July 1980.

Mukesh N. Gatha, M.D., 1935 Eastchester Road, Apt. 22-D, Bronx, NY 10461. B. J. Medical (India) 1972. Board eligible. Group, partnership. Available July 1980.

CARDIOLOGY—Barton E. Cohen, M.D., 166 East 34th Street, Apt. 10—G, New York, NY 10016. NYU 1973. Also, general internal medicine. Board certified (IM). Group, partnership. Available July 1980.

Roger N. Zitrin, M.D., 8 Micieli Place, Brooklyn, NY 11218. Rutgers 1974. Group, partnership, solo. Available.

Stephen K. Kwan, M.D., Deborah Heart and Lung Center, Browns Mills, NJ 08015. Natl. Defense Med. Center (Taiwan) 1972. Solo, group, hospital-based. Available July 1980.

M. Tejura, M.D., 3401 Gibralter Heights, Apt. J-5, Toledo, OH 43609. Topiwalla (India) 1974. Solo, partnership. Available July 1980.

Shou-Li Hong, M.D., 7400 Haverford Avenue, Apt. E-113, Philadelphia, PA 19151. Taipei (Taiwan) 1970. Also, general internal medicine. Board certified (IM). Partnership, group, solo. Available July 1980.

H. G. Yekanath, M.R.C.P. (UK), 10 Overlook Road, Apt. 4-G, Summit 07901. Mys ore (India) 1965. Also general internal medicine. Single or multi-specialty group, institutional. Available July 1980.

CARDIOVASCULAR DISEASES—Alan Feit, M.D., 88 Howard Park Drive, Tenafly 07670. Columbia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

Joel A. Roffman, M.D., 282 Washington Street, Apt. B-2, Hartford, CT 06106. Boston 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Kandathil M. Mathew, M.D., 22 Woodland Park, Hartford, CT 06105. Kasturba (India) 1969. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, solo. Available July 1980.

Sudhir Amaram, M.D., 1310 Pennsylvania Ave., Apt. 12-E, Brooklyn, NY 11239. Osmania (India) 1973. Also, general internal medicine. Board certified (IM). Any type practice. Available July 1980.

James A. Quinn, M.D., 3 Washington Square, Euclid, OH 44143. Columbia 1974. Also, general internal medicine. Board eligible (IM). Single-specialty group, partnership, institutional. Available July 1980.

Arnold J. Greenspon, M.D., 922-C Chatham Lane, Columbus, OH 43221. University of Pennsylvania 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

Stanley M. Lewis, M.D., 14 Third Avenue, Branford, CT 06405. Albany 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

Vidyadhar R. Gandra, M.D., 1350 W. Bethune Avenue, Apt. 907, Detroit, MI 48202. Gandhi (India) 1972. Also, general internal medicine. Board certified (IM). Partnership, single-specialty group, solo. Available August 1980.

James D. Lynch, M.D., 3732 Lowell Road, Cleveland Heights, OH 44121. Hahnemann 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

DERMATOLOGY—David L. Cohen, M.D., 3228 Johnson Avenue, Riverdale, NY 10463. Mount Sinai 1976. Partnership, solo, multi-specialty group. Available July 1980.

Seymour Rand, M.D., Case-Western Reserve University Hospital, 2065 Adelbert Road, Box 352, Cleveland, OH 44106. Medical College of Virginia 1975. Solo, partnership. Available July 1980.

ENDOCRINOLOGY—Howard M. Lando, M.D., 8105 Kane Court, Alexandria, VA 22308. Medical College of Virginia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, research. Available July 1980.

Jack Cukierman, M.D., 215 Stearns Hill Road, Waltham, MA 02154. SUNY-Buffalo 1975. Also, general internal medicine, with special interest in diabetes. Board eligible (IM). Single or multi-specialty group, partnership. Available July 1980.

Henry G. Fein, M.D., 2008 Baltimore Road, Apt. E-41, Rockville, MD 20851. Columbia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, institutional. Available July 1980.

FAMILY PRACTICE—Eric N. Kruger, M.D., Hunter Hills, G-4, Flemington 08822. Jefferson. Group, partnership, solo. Available July 1980.

James M. Lynch, Jr., M.D., 1623 Parkcrest Circle, Apt. 300, Reston, VA 22090. Guadalajara 1976. Single or multi-specialty group, partnership. Available July 1980.

Mark S. Weitman, M.D., 5615 Phillips Avenue, Apt. 3, Pittsburgh, PA 15217. SUNY-Buffalo 1977. Institutional, partnership, single-specialty group. Available July 1980.

GASTROENTEROLOGY—Iftikhar A. Malik, M.D., 175 Willoughby Street, Apt. 5-F, Brooklyn, NY 11201. King Edward (Pakistan) 1973. Also, general internal medicine. Board eligible (IM). Solo, partnership, institutional. Available July 1980.

Ira E. Mayer, M.D., 3193-D Buford Highway, NE, Atlanta, GA 30329. New York Medical 1975. Also, general internal medicine. Board certified (IM). Research, single or multi-specialty group. Available July 1980.

John J. Sheehan, Jr., M.D., 589 Country Club Lane, Nashville, TN 37205. Pennsylvania State 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Prafulla K. Kirtane, M.D., 73-05 150th Street, Apt. 3-A, Flushing, NY 11367. Baroda (India) 1973. Also, general internal medicine. Board certified (IM). Solo, multi-specialty group, partnership. Available.

Allan M. Effron, M.D., P.O. Box 593, Woodcliff Lake 07675. Guadalajara 1974. Single or multi-specialty group, partnership. Available July 1980.

David L. Gottesman, M.D., 13357 Cedar Road, Cleveland Heights, OH 44118. NYU 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, solo. Available July 1980.

Indira R. Kalram, M.D., 34 Gardner Street, Apt. 43, Boston, MA 02134. Andhra (India) 1973. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

George M. Cibik, M.D., 2991 School House Lane P14W, Philadelphia, PA 19144. Albany 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

GENERAL PRACTICE—Carlos A. Viola, M.D., 115 Oakglen #207, Port Lavaca, TX 77979. Buenos Aires 1950. Special interest, general surgery. Multi-specialty group, institutional, solo. Available.

HERMATOLOGY/ONCOLOGY—K K. Aggarwal, M.D., 1525 Millersport Highway, Apt. 304, Williamsville, NY 14221. Delhi (India) 1969 Board certified. Solo, institutional. Available July 1980.

INTERNAL MEDICINE—Thomas Pitoscia, M.D., 19 Upper Overlook Road, Summit 07901. Rush 1977. Multi-specialty group, partnership, industrial, academic. Available July 1980.

Mohammad A. Chaudhry, M.D., 16 Farmhouse Road, Mountain Top, PA 18707. King Edward (Pakistan) 1963. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Yallappa Nadiminti, M.D., 605 Louisiana Avenue, Apt. 168, Brooklyn, NY 11239. Government Medical College (India) 1973. Subspecialty, neoplastic diseases. Board certified. Solo, institutional, partnership, single or multi-specialty group. Available July 1980.

Douglas R. Shumaker, M.D., 7861 Jefferson Street, Hummelstown, PA 17036. George Washington University 1977. Partnership, single or multi-specialty group, solo, emergency room. Available July 1980.

Joel M. Cohen, M.D., 1131 University Boulevard West, Apt. 1404, Silver Spring, MD 20902. SUNY-Downstate 1975. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, partnership. Available July 1980.

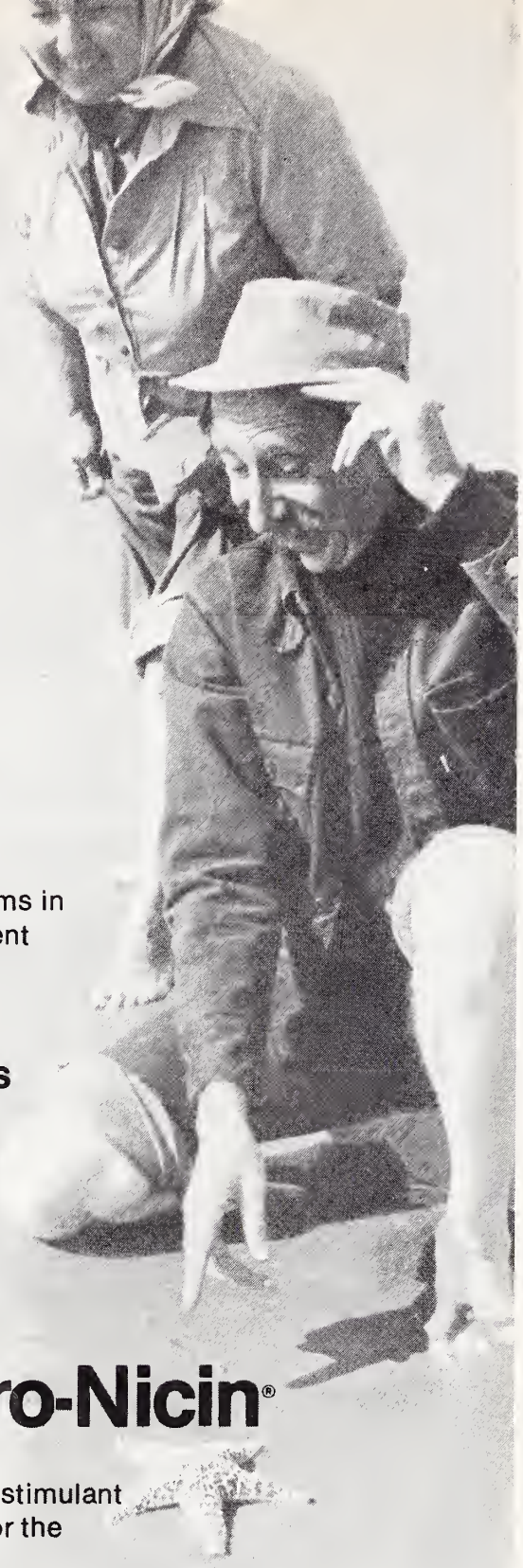
Sybil Kramer, M.D., 68 Winchester Street, Brookline, MA 02146. SUNY-Downstate 1975. Subspecialty, endocrinology. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Mark L. Friedman, M.D., 2901 S. King, Apt. 1003, Chicago, IL 60616. University of Chicago 1977. Subspecialty, emergency medicine. Single or multi-specialty group, partnership. Available July 1980.

Richard L. Rudolph, M.D., 124 Pearl Street, Red Bank 07701. CMDNJ 1976. Board eligible. Single or multi-specialty group, partnership. Available.

Robert H. Gordon, M.D., 5500

Alert and functioning in the sunset years



Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:

Pentylenetetrazole	100 mg.
Nicotinic Acid	100 mg.
Ascorbic Acid	100 mg.
Thiamine HCL	25 mg.
l-Glutamic Acid	50 mg.
Niacinamide	5 mg.
Riboflavin	2 mg.
Pyridoxine HCL	3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Wissahickon Ave., Apt. 405-C, Philadelphia, PA 19144. Jefferson 1975. Subspecialty, rheumatology. Board certified. Any type practice. Available July 1980.

Lawrence P. Saladino, M.D., 3428-B Alpine Court, Lexington, KY 40502. Georgetown 1975. Subspecialty, emergency medicine. Institutional, multi-specialty group, emergency room. Available July 1980.

Laurence J. Clark, M.D., 5038 Cliffhaven Drive, Annandale, VA 22003. Georgetown 1975. Subspeciaity, emergency medicine. Partnership, solo, emergency room. Available July 1980.

Devi P. Misra, M.D., 7K University Terrace, Columbia, MO 65201. SCB Medical College (India) 1967. Subspecialty, pulmonary medicine. Board certified. Solo, institutional, group. Available July 1980.

Jon Allen Kotler, M.D., c/o Dept. of Medicine, 1356 Lusitana Street, Honolulu, HI 96813. Emory 1976. Subspecialty, emergency medicine. Board eligible. Single or multi-specialty group, partnership. Available.

Howard L. Kramer, M.D., 4 Longfellow Place, Apt. 803, Boston, MA 02114. Florida 1975. Board certified. Single or multi-specialty group, partnership. Available.

Mirza M. Ashraf, M.D., West St. Road, Carthage, NY 13619. King Edward (Pakistan) 1967. Subspecialty, cardiovascular diseases. Solo, single-specialty group, institutional. Available.

Mohamed M. Haq, M.D., 10555 Fondren, Apt. 422, Houston, TX 77096. Osmania (India) 1973. Subspecialty, neoplastic diseases. Board certified. Single or multi-specialty group, research. Available July 1980.

Jay Kaplan, M.D., 140 Kane Street, Apt. D-2, West Hartford, CT 06119. Bologna (Italy) 1977. Partnership, single or multi-specialty group. Available July 1980.

Kandathil M. Mathew, M.D., 22 Woodland Park, Hartford, CT 06105. Kasturba (India) 1969. Subspecialty, cardiology. Board certified. Partnership or institutional. Available July 1980.

Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, cardiovascular diseases. Board certified. Group or partnership. Available July 1980.

NEOPLASTIC DISEASES—Arlene A. Forastiere, M.D., 10 Waterside Plaza, Apt. 3-J, New York, NY 10010. New York Medical 1975. Subspecialty, hematology. Board certified (IM). Single-specialty group, institutional, research. Available July 1980.

NEPHROLOGY—Dinesh Shukla, M.D., 514 E. 88th Street, Apt. 2-B, New York, NY 10028. Maulana Azad (India) 1973. Subspecialty, general practice. Partnership, single or multi-specialty group. Available July 1980.

Alan S. Terlinsky, M.D., 1938 McFalls Street, McLean, VA 22101. Georgetown 1975. Also, general internal medicine. Board certified (IM). Partnership, solo, single-specialty group. Available June 1980.

Joon Koo Yeo, M.D., 5460 Bahama Terrace, Apt. 9, Cincinnati, OH 45223. Seoul (Korea) 1970. Also, general internal medicine. Board certified (IM). Partnership, sin-

gle or multi-specialty group. Available July 1980.

Vincent A. Graziano, M.D. 445 East 68th Street, Apt. 4-B, New York, NY 10021. Georgetown 1975. Also general internal medicine. Board certified (IM). Solo, group, or partnership. Available July 1980.

NEUROLOGY—Eugene C. Madonia, M.D., 11105 Troy Road, Rockville, MD 20852. Georgetown 1976. Single or multi-specialty group, partnership. Available July 1980.

Richard B. Brooks, M.D., 1 David Lane, Yonkers, NY 10701. SUNY-Upstate 1976. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Chitpadi R. Dandillaya, M.D., 16 Harper Terrace, Cedar Grove 07009. Osmania (India) 1962. Also, general internal medicine. Board eligible. Multi-specialty group, partnership, solo. Available July 1980.

Palanivel G. Moorthy, M.D., Aring Neurology Center, Pavilion B, Buc Medical Center, Cincinnati, OH 45267. Kilpauk (India) 1968. Board eligible. Solo, partnership, multi-specialty group. Available July 1980.

Ramanand C. Dandillaya, M.D., 16 Harper Terrace, Cedar Grove 07009. Osmania Medical 1963. Board eligible. Group, partnership, solo. Available July 1980.

Bong W. Chang, M.D., 1350 W. Bethune Avenue, Apt. 1209, Detroit, MI 48202. Seoul (Korea) 1972. Board eligible. Group or solo. Available April 1980.

OBSTETRICS/GYNECOLOGY—Balu G. Kamalapurker, M.D., 150 55th Street, Brooklyn, NY 11220. Karnatak (India) 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Shawky N.F. Habashy, M.D., 1408 South Country Club, Carlsbad, NM 88220. Ain Shams University (Egypt) 1965. Board certified. Single or multi-specialty group, partnership. Available March 1980.

Michael T. Kicenuik, M.D., 49 Crescent Road, Livingston 07039. CMDNJ 1972. Board eligible. Any type practice. Available July 1980.

W.L. Schneiderman, M.D., 287 Belblossom Way, Los Gatos, CA 95030. New York Medical 1974. Board eligible. Group or partnership. Available March 1980.

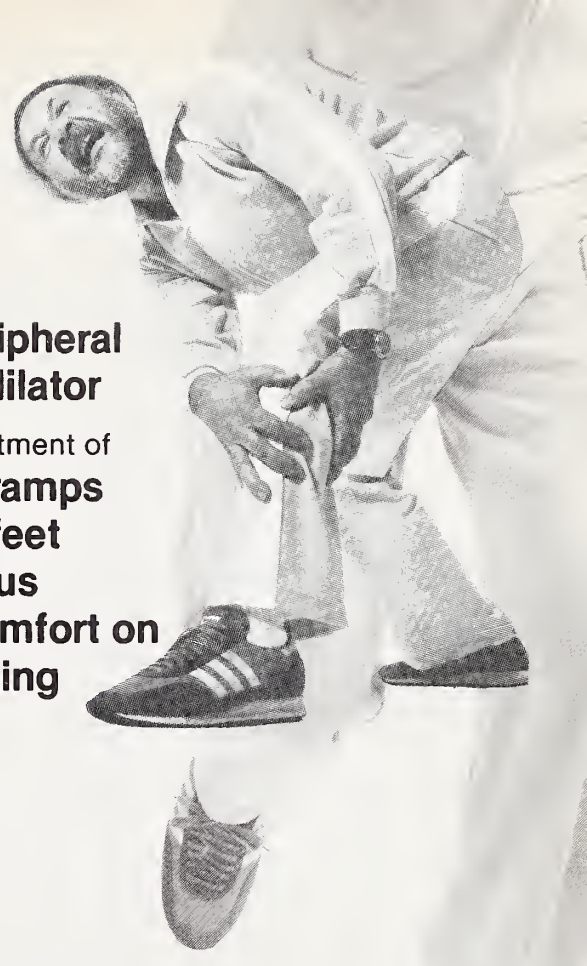
Mohamed I. Abdel-Aziz, M.D., Spindrift Circle, Apt. 12-D, Baltimore, MD 21234. Alexandria (Egypt) 1969. Solo, group, partnership, institutional. Available July 1980.

Jyotsna S. Mehta, M.D., 729 Village Drive, Edison 08817. Seth (India) 1973. Single or multi-specialty group, partnership. Available July 1980.

Jose Cohen, M.D., 2627 Maxwell Street, Philadelphia, PA 19152. Cordoba (Argentina) 1974. Solo, partnership, single-specialty group. Available July 1980.

Inchul Park, M.D., 736 Carter Street, Apt. 12, Rochester, NY 14621. Seoul (Korea) 1972. Single or multi-specialty group, partnership. Available July 1980.

Rajan Jairam, M.D., 114 Franklin St., Apt. 2E1, Morristown 07960. Kasturba, Bangalore (India) 1972. Board eligible. Single or



A peripheral vasodilator

for treatment of
leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's
comfort/convenience
in choice of
3 strengths

Gradual Release
LIPO-NICIN®/300 mg.

Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release
LIPO-NICIN®/250 mg.

Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid.....150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

multi-specialty group, partnership. Available August 1980.

Khalid Parwez, M.D., 420 Stockholm Street, Apt. C-9, Brooklyn, New York 11237. Nishtar (Pakistan) 1971. Partnership, solo, single or multi-specialty group. Available July 1980.

Ambalavanar Somaskanda, M.D., 4002 Yeager Drive, Nimitz Village, Great Lakes, IL 60088. University of Ceylon (Sri Lanka) 1967. Board eligible. Single or multi-specialty group, partnership, or solo. Available August 1980.

Robert A. Stern, M.D., 7 Balint Drive, Apt. 128, Yonkers, NY 10710. New York Medical 1976. Partnership, single or multi-specialty group. Available July 1980.

Robert L. Daniels, M.D., 60 Haven Avenue, Apt. 9-E, New York, NY 10032. Columbia. Board eligible. Group or partnership. Available July 1980.

Jeffrey M. Good, M.D., Mt. Sinai Medical Center, Milwaukee, WI 53201. University of Barcelona (Spain) 1975. Board eligible. Single or multi-specialty group. Available August 1980.

ONCOLOGY—Dinesh N. Patel, Antoinette Place, Apt. 111-E, Indianapolis, IN 46227. Baroda (India) 1972. Also, general internal medicine. Board eligible (IM). Partnership, single or multi-specialty group, institutional, solo. Available July 1980.

OPHTHALMOLOGY—Jay R. Rowes, M.D., 6144 Park Avenue, Indianapolis, IN 46220. Cornell 1976. Board eligible (IM). Solo, partnership, single-specialty group. Available December 1981.

Arthur N. Landau, M.D., 327 East 58th Street, New York, NY 10022. Albert Einstein 1975. Solo, partnership, single-specialty group. Available July 1980.

Melvyn H. Defrin, M.D., 1889 Camberley Circle, Memphis, TN 38138. SUNY-Stony Brook 1975. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

Paul R. Singer, M.D., 2160 Pheasant Run, St. Louis, MO 63043. University of Rochester 1973. Board certified. Single or multi-specialty group, solo. Available June 1980.

Jeffrey L. Oberman, M.D., 5600 Munhall Road, Pittsburgh, PA 15217. Albany Medical 1976. Board eligible. Partnership, single-specialty group, solo. Available July 1980.

Aly Sergie, M.D., 1815 Greenwich Woods Drive, Apt. 33, Silver Spring, MD 20903. Aleppo 1973. Solo, single-specialty group, partnership. Available July 1980.

Teofil B. Kulyk, M.D., 435 East 70th Street, New York, NY 10021. CMDNJ 1976. Board eligible. Solo, partnership, single-specialty group. Available July 1980.

Robert F. Stephens, M.D., 502 Woodside Ave., Narberth, PA 19072. Washington University 1971. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Frederick A. Isaacs, M.D., 1234 Midland Avenue, Bronxville, NY 10708. New York Medical 1976. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

OTORHINOLARYNGOLOGY—Howard Taylor, M.D., 1560 North Sandburg Terrace, Apt. 3408, Chicago, IL 60610. Columbia 1976. Board eligible. Single-specialty group, partnership, solo. Available July 1980.

David Ahmadi, M.D., 436 E. 69th Street, New York, NY 10021. Tehran (Iran) 1968. Subspecialty, head and neck surgery. Board eligible. Multi-specialty group, administrative, partnership, solo. Available July 1980.

Didier L. Peron, M.D., 2 Crest Avenue, Larchmont, NY 10538. Paris 1969. Special interest, otology. Single or multi-specialty group, partnership, solo. Available July 1980.

PATHOLOGY—Arthur R. Copeland, M.D., 826 Goler House, Rochester, NY 14620. Albany 1976. Both AP/CP. Board eligible. Group. Available July 1980.

PEDIATRICS—Masond Ahdieh, M.D., 69-49 44th Avenue, Woodside, NY 11377. Tabriz (Iran) 1972. Multi-specialty group, institutional, emergency room. Available July 1980.

Mohammed H. Nomaan, M.D., 856 W. Nelson Street, Apt. 501, Chicago, IL 60657. Khyber (Pakistan) 1976. Board eligible. Institutional, multi-specialty group, partnership, research, public health or school health. Available July 1980.

Mohammad Yusaf, M.D., 7367 Hardscrapple Drive, Apt. C, St. Louis, MO 63123. King Edward (Pakistan) 1975. Multi-specialty group, institutional, solo, emergency room. Available July 1980.

Wijepala Kottahachchi, M.D., 37 Judson Street, Apt. 10-B, Edison 08817. University of Ceylon (Sri Lanka) 1969. Partnership, single-specialty group, solo. Available July 1980.

Walayat A. Khan, M.D., P.O. Box 634, Graceville, FL 32440. King Edward (Pakistan) 1971. Board eligible. Solo, emergency room. Available.

Dhanireddy Ramasubbareddy, M.D., 212 Congressional Lane, Apt. T-2, Rockville, MD 20852. Kurnool Medical (India) 1974. Any type practice. Available July 1980.

Dipak S. Banker, M.D., 436 E. 69th Street, Apt. 1-D, New York, NY 10021. G.S. Medical (India) 1971. Subspecialty, hematology. Board certified. Solo, partnership, single or multi-specialty group. Available July 1980.

Alan R. Rushton, M.D., 181 Hotchkiss Grove Road, Branford, CT 06405. University of Chicago 1977. Single or multi-specialty group, institutional. Available July 1980.

Bernard L. Lipman, M.D., 8261 Temple Road, Philadelphia, PA 19150. Univ. of South Carolina 1939. Special interest, pediatric allergy. Board certified. School health, institutional. Available.

S. Rajaram, M.D., 24 Wendy Lane, Charleston, SC 29407. Stanley Medical (India) 1969. Board eligible. Group, solo, partnership, government. Available.

R. Veluswamy, M.D., 450 West End Avenue, Apt. 5, North Plainfield 07060. Madras (India) 1973. Board eligible. Institutional, solo, group, partnership. Available July 1980.

Mark S. Ginsburg, M.D., 73-02 263rd Street, Glen Oaks, NY 11004. Medical College of Ohio 1977. Single or multi-specialty group, partnership. Available July 1980.

Martin M. Fisher, M.D., 264-10 74th Avenue, New Hyde Park, NY 11004. Einstein 1975. Board eligible. Partnership, multi-specialty group, institutional. Available July 1980.

Gita S. Sikand, M.D., 721 Westwood Drive, Apt. 2-B, Clayton, MO 63105. All-India 1972. Special interest, hematology. Board certified. Partnership, multi-specialty group, institutional. Available July 1980.

Augusto Pimazoni-Netto, M.D., Rua Jose Getulio 78 Aclima Cao, CEP, Sao Paulo, Brazil 01509. University of Sao Paulo, 1965. Administrative, industrial. Available January 1981.

PHYSICAL MEDICINE/REHABILITATION— Aaron M. Levine, M.D., Box 2128-2111 Holly Hall Drive, Houston, TX 77054. University of Pittsburgh 1971. Institutional, research, solo. Available July 1980.

Dinesh C. Shah, M.D., 334 83rd Street, Brooklyn, NY 11209. M.P. Shah (India) 1969. Institutional, multi-specialty group, solo, emergency room. Available July 1980.

PSYCHIATRY—Jean P. Marachi, M.D., 1251 Boulevard, New Haven, CT 06511. University of Miami 1975. Board eligible. Special interest, child psychiatry. Partnership, institutional, research. Available September 1980.

Melvin W. Cohen, 681 Clarkson Avenue, Brooklyn, NY 11203. Meharry 1968. Board certified. Institutional, multi-specialty group, research. Available July 1980.

John F. McGrail, M.D., 1819 Russet Drive, Cherry Hill 08003. University of Ottawa 1961. Board certified. Single or multi-specialty group, partnership. Available June 1980.

PULMONARY MEDICINE—Frederick E. Cosco, M.D., 10 Waterside Plaza, Apt. 3-J, New York, NY 10010. Georgetown 1974. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

Thomandram S. Sekar, M.D., 100 Tremont Street, Apt. 1, Brighton, MA 02135. Stanley (India) 1970. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, institutional. Available July 1980.

RADIOLOGY—Anil G. Desai, M.D., 701 Red Bank Avenue, Apt. G-10, Woodbury 08096. Special interest, diagnostic radiology and nuclear medicine. Baroda (India) 1972. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Thomas R. Fitzsimons, M.D., P.O. Box 73, Hellertown, PA 18055. Penn State 1973. Special interest, diagnostic radiology. Board certified. Partnership, single or multi-specialty group. Available July 1980.

Arunugam Ramasubramaniam, M.D., 430 East 67th Street, Apt. 8-J, New York, NY 10021. Madras (India) 1970. Board eligible. Any type practice. Available.

Hariprasad P. Kurella, M.D., 590 Flatbush

Avenue, Brooklyn, NY 11225. Sri Venkateswara 1971. Board certified. Group, partnership, solo. Available.

Robert S. Nuba, M.D., 73-23 210 Street, Bayside, NY 11364. Guadalajara 1975. Special interest, diagnostic radiology. Single or multi-specialty group, partnership. Available July 1980.

Stephen J. Fischer, M.D., 145 East 15th Street, Apt. 12-U, New York, NY 10003. Wisconsin 1975. Special interest/diagnostic radiology. Board certified. Group, hospital. Available.

S. David Bogart, M.D., 79-39 210th Street, Bayside, NY 11364. Special interest, diagnostic radiology. Board certified. Group, hospital-based group. Available.

RHEUMATOLOGY—Richard D. Gordon, M.D., 37 Outlook Drive, Apt. 31. Worcester, MA 01602. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership. Available July 1980.

SURGERY, GENERAL—Louis-Joseph Auguste, M.D., 192-15B 64 Circle. Apt. 1-B, Fresh Meadows, NY 11365. Port au Prince, Haiti 1973. Special interest, abdominal surgery. Research, institutional, multi-specialty group. Available July 1980.

Asif Husain, M.D., 56 Anderson Avenue, Englewood Cliff 07632. Dow (Pakistan) 1973. Special interest, general practice. Board eligible. Single or multi-specialty group, solo. Available July 1980.

Hardas Rathod, M.D., 4985 Hawaiian Terrace, Cincinnati, OH 45223. Baroda (India) 1970. Partnership. Available July 1980.

Mohammed Sabir, M.D., 43 Maple Street, Addison, NY 14801. King Edward (Pakistan) 1967. Board certified. Solo, partnership, single-specialty group. Available June 1980.

Mohammand A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liaquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roc Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Bethune Av., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.

SURGERY, NEUROLOGICAL—Syed J. Shahid, M.D., 157 Corbin Place, Brooklyn, NY 11235. Dow Medical (Pakistan) 1972. Single or multi-specialty group, solo. Available.

SURGERY, ORTHOPEDIC—William Stratford, M.D., 16 Bennett Village Terrace, Buffalo, NY 14214. SUNY-Buffalo 1975. Solo, partnership, single-specialty group. Available July 1980.

Lewis Preschel, M.D., 104-40 Queens Boulevard, Forest Hills, NY 11375. SUNY-Downstate 1975. Board eligible. Partnership. Available July 1980.

SURGERY, PLASTIC—Donald F. Clukies, M.D., 681 Richardson Road, Rochester, NY 14623. Upstate (Syracuse, NY) 1973. Special interest, head and neck surgery. Board eligible (general surgery). Partnership, single or multi-specialty group. Available July 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Sidney Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available June 1980.

UROLOGY—G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

Eliahu Koren, M.D., 5700 Arlington Avenue, Apt. 6-J, Riverdale, NY 10471. Jerusalem 1968. Board eligible. Group, partnership, solo. Available July 1980.

PERSONAL ITEMS

Dr. McAfoos Ordained

On December 5, 1979, Louis G. McAfoos, Jr., M.D., was ordained a priest of the Protestant Episcopal Church in services held at the Grace Episcopal Church, Haddonfield. His ordination was preceded by years of involvement with the Church in the lay ministry. He was received as a Candidate for Holy Orders in the Diocese of New Jersey in 1974 and pursued the necessary studies for taking the nine canonical examinations required by the Board of Examining Chaplains and was ordained a Deacon on June 2, 1979 at the Trinity Cathedral, Trenton.

Dr. McAfoos, an internist practicing in Camden, is on the staff of the West Jersey Hospital. He is a Fellow of the American College of Physicians, the Philadelphia College of Physicians and the American Geriatric Society. He is active in organized medicine, having served as President, Treasurer and now Trustee of his County Medical Society (Camden). Dr. McAfoos is a member of MSNJ's House of Delegates and a past-member and vice-chairman of the Committee on Finance and Budget. He is an amateur musician and horticulturist.

Dr. and Mrs. McAfoos have two children, a son, an attorney, and a daughter, a sophomore at Mount Holyoke.

Dr. Knauer Heads NJACS

Warren H. Knauer, M.D., codirector of the Wuester Tumor Clinic in Elizabeth, was installed on December 1st as head of the New Jersey Chapter of the American College of Surgeons.

Dr. Knauer is chairman of the malignant and allied disease department at Elizabeth General Hospital and serves on the surgical staff at Alexian Brothers and St. Elizabeth Hospitals in Elizabeth, at the College Hospital in Newark, and at the John E. Runnell's Hospital in Berkeley Heights. A graduate of Columbia University's College of Physicians and Surgeons, Dr. Knauer took surgical residencies at St. Vincent's and Bellevue Hospitals in New York and at Yale Medical Center. He began specialty studies in cancer with residencies in head and neck surgery and oncology at New York's Memorial Center for Cancer and Allied Diseases, and took a fellowship in pathology at Presbyterian Medical Center, also in New York.

Dr. Knauer is a member of the Surgeons' National Commission on Cancer, the Society of Head and Neck Surgeons, the Southeastern Surgical Conference, the Society of Surgeons of New Jersey, and is a national delegate to the American Cancer Society and a member of its professional education committee and the subcommittee of professional education conferences.

A former president of the Oncology Society of New Jersey, Dr. Knauer is the author of many scientific papers on cancer and the recipient of the Squibb Olin Medallion for Cancer Study, the American Cancer Society/New Jersey Division Physicians' Award.

Dr. Novich Cited

Dr. Max M. Novich received the "President's Citation for Contributions and Achievements in Sports Medicine" from the New Jersey Association for Health, Physical Education and Recreation during an Honor Awards Luncheon at the Boardwalk Regency Hotel in Atlantic City on Thursday, November 8, 1979.

Dr. Novich, a 1937 graduate of the University of North Carolina where he was a varsity football player and intercollegiate boxing champion, worked his way through college on a boxing scholarship. He received his M.D. degree at the University of Louisville Medical School in 1941.

Dr. Novich is a nationally and internationally prominent orthopedic surgeon, pioneer and authority in sports medicine. He is Clinical Professor of Surgery and Director of Sports Medicine at the United Hospitals Orthopedic Center-Hospital for Crippled Children in Newark where he heads an athletic injury clinic. A similar clinic is planned for the College Hospital of CMDNJ-New Jersey Medical School. He is the author of numerous articles in national medical journals, frequently quoted in the press and appears on radio and television shows. He has written two books, *Training and Conditioning of Athletes,* now going into second edition, and the *High Energy Diet for Dynamic Living.*

He has been a team physician for Newark high schools and professional football teams since 1946 and, for the last eight years, physician for Linden High School. He has been associated with the medical care of international athletic teams including A.A.U., Maccabiah, Pan American, Olympic and World Cup Amateur boxers. He has served on the medical jury for boxing for the last three Olympic games and has been selected to serve again in the same capacity for the Moscow Olympic Games.

Dr. Novich has offices in Perth Amboy and Newark. He resides in South Orange with his wife Jean and three children; Jay, age 19, a sophomore at the University of Louisville; Nina, age 18, a freshman at the University of North Carolina and Bebe, age 16, a junior at Columbia High School. His wife, Jean, a former operating room supervisor at Mt. Sinai Hospital in New York and Newark Beth Israel Medical Center, is presently a Trustee of the Village of South Orange.

ACC Fellows

The following cardiovascular specialists, members of the Medical Society of New Jersey, recently achieved the rank of Fellowship in the American College of Cardiology:

Trevor H. Atherley, M.B.B.S., Newark
Barry H. Cohen, M.D., Trenton
Barry B. Galton, M.D., Wayne

CME CALENDAR

ANESTHESIOLOGY

Mar.

7-9 **Anesthesia Seminar**
Hyatt House, Cherry Hill
(NJ State Society of Anesthesiologists and AMNJ)

12 **Anesthesia for Common Pediatric Surgical Problems**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

Apr.

9 **Anesthesia in Toxemia of Pregnancy**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

Mar.

4 **Allergy**
9 a.m.—Freehold Area Hospital
(AMNJ)

4 **Chronic Renal Failure**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

4 **Medical Lecture Series**
11 9-10 a.m.—Holy Name Hospital,
18 Teaneck
25 *(Holy Name Hospital and AMNJ)*

5 *Proper Use of Endoscopy*
11:30 a.m.-1 p.m.—Rahway Hospital
(AMNJ)

5 **Arrhythmias**
1-3 p.m.—Christ Hospital, Jersey City
(AMNJ)

5 **Joint Chest Conference**
9:30 a.m.-3:30 p.m.—Coachman Inn, Cranford
(New Jersey Thoracic Society, NJ Chapter American College of Chest Physicians and AMNJ)

5 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

5 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

5 **Adult Respiratory Distress Syndrome and Pulmonary Edema**

12 **Update on Genitourinary Cancer**

26 **Antibiotics and Antibiotic Resistance**
9-11 a.m.—Roosevelt Hosp., Menlo Park
(Middlesex General Hospital, AAFP and AMNJ)

5 **Advances in Medicine**
12 9:30-11 a.m.—Bergen Pines Hospital, Paramus
19 *(Bergen Pines County Hospital and AMNJ)*
26

5 **Endocrinology Conferences**
12 3:30-5 p.m.—Rotates between College
19 Hospital, Newark Beth Israel Medical
26 Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

6-7 **Pulmonary Arts Conference**
Holiday Inn, Route #1, North Brunswick
(Delaware-Raritan Lung Association)

7 **Urology Grand Rounds**
14 3-5 p.m.—NJ Medical School,
21 Newark
28 *(CMDNJ and AMNJ)*

7 **Renal Program Conferences in**
14 **Nephrology**
2-3:15 p.m.—College Hospital, Newark
(Nephrology Section, AMNJ)

8 **Visiting Professor**
Medical Grand Rounds
12:30-1:30 p.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

8 **Evaluation of the Impotent Male**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

11 **Connective Tissue Disorders**
8-10 p.m.—Schering Corp., Kenilworth
(NJ Dermatological Society and AMNJ)

11 **Reflux Nephropathy**
8-9 a.m.—St. Peter's Medical Center, New Brunswick
(Nephrology Society of NJ and AMNJ)

11 **Reflux Nephropathy**
12 noon-1 p.m.—Middlesex General Hospital, New Brunswick
(Nephrology Society of NJ and AMNJ)

12 **Medical Lecture Series**
19 1-3 p.m.—Christ Hospital, Jersey City
26 *(Christ Hospital and AMNJ)*

13 **Ultrasound in Ophthalmology**
7:30-9:30 p.m.—Location to be announced
NJ Institute of Ultrasound in Medicine and AMNJ)

13 **Insect Allergies**
8-9 p.m.—Burlington Co. Memorial Hospital, Mount Holly
(Burlington Co. Med. Society and AMNJ)

17 **Inflammatory Bowel Disease, Part II**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

18 **Fluid and Electrolyte Imbalance**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

18 **Immunology**
8:30 p.m.—Fair Lawn Memorial Hospital
(AMNJ)

18 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ and AMNJ)

19 **Interactions between Science Reporting and Medical Achievement**
11:30 a.m.-1 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

20 **Hepatitis Update**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

22 **Symposia on Aging for Health Professionals**
9:30-11 a.m.—N.J. Medical School, Newark
(CMDNJ and AMNJ)

25 **Diagnosis of Peripheral Vascular Disease**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

26 **Vitamins**
9:30-11:30 a.m.—Riverside Hospital Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

29 **11th Annual Seminar—Sports Medicine**
Valley Hospital, Ridgewood
(The Valley Hospital)

Apr.

1 **Medical Lecture Series**
7 9-10 a.m.—Holy Name Hospital,
15 Teaneck
22 *(Holy Name Hospital and AMNJ)*
29

2 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Newark
Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

2 **Medical Lecture Series**
16 1-3 p.m.—Christ Hospital, Jersey City
23 *(Christ Hospital and AMNJ)*
30

2 **Cardiac Diagnostic Procedures**
1-4:30 p.m.—Town and Campus Motor Inn, Pleasant Valley Way, West Orange
(Essex County Heart Association, Inc. Chapter, NJ Heart Association and AMNJ)

THE THIRD ANNUAL
EDWARD G. WATERS
GYNECOLOGIC CONFERENCE

Presented by the Department of Obstetrics and Gynecology of the New Jersey Medical School—CMDNJ at Resorts International Hotel, Atlantic City, New Jersey.

WORKSHOPS on April 10, 1980
GYNECOLOGY CONFERENCE on April 11-13, 1980

For further information, please contact Herik Caterini, M.D., Department of Obstetrics and Gynecology, New Jersey Medical School, 100 Bergen Street, Newark, New Jersey 07103. (201) 456-6480.

CONTINUING EDUCATION CREDITS:

	Workshops April 10	Conference April 11-13
AMA Credits Category I:	5	20
ACOG Cognates:	5	17
AAFP Prescribed Credits:	5	17
AOA Credits Category 2-D:	5	16
NJSNA Credit Hours:	5	20 (pending)

2 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

2 **Bronchial Asthma**
11:30 a.m.-1 p.m.—Rahway Hospital
(Rahway Hospital and AMNJ)

2 **Pancreatic & Biliary Tract Diagnoses**
1-5 p.m.—St. Elizabeth Hospital, Elizabeth
(St. Elizabeth Hospital and AMNJ)

2 **Endocrinology Conferences**
9 3:30-5 p.m.—Rotates between College
16 Hospital, Newark Beth
23 Israel Medical Center, Newark and VA
30 Medical Center, East Orange
(Endocrinology Section of AMNJ)

2 **Advances in Medicine**
9 9:30-11 a.m.—Bergen Pines County
16 Hospital
23 *(Bergen Pines County Hospital*
30 *and AMNJ)*

4 **Urology Grand Rounds**
3-5 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

4 **Renal Program Conferences in Nephrology**
2-3:15 p.m.—College Hospital, Newark
(Nephrology Section, AMNJ)

8 **The Skin and Infectious Diseases**
8-10 p.m.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

9 **Collagen Disease**

30 **Research on Cigarette Smoking**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

9 **New and Old Laboratory Methods**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

9 **Nutrition in Cancer**

16 **High Carbohydrate/High Fiber Diets for Diabetic and Hyperlipidemic Patients**

23 **Cutaneous and Oral Manifestations of Infectious Diseases**

30 **Common ENT Problems**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

12 **Hospital Management of Diabetic Patients**

19 **Management of Breast Cancer**

26 **Pneumonias**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

15 **Low Back Pain**
7 p.m.—Irvington General Hospital
(Irvington General Hospital and AMNJ)

15 **Diseases of the Pituitary**
12 noon—St. Mary's Hospital, Orange
(St. Mary's Hospital and AMNJ)

16 **William P. Burpeau Annual Award Dinner**
6 p.m.—The Manor, West Orange
(Urology Section, AMNJ)

16 **Antimicrobial Use in Pulmonary Infections**
11:30 a.m.-1 p.m.—VA Medical Center, East Orange
(VA Medical Center Pulmonary Disease Section and AMNJ)

17 **Inflammatory Bowel Disease**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

18 **Platelets, Prostaglandins, Lipids in Atherosclerosis**
8:30 a.m.-5:30 p.m.—Sheraton Center Hotel, New York City
(Rutgers Medical School and AMNJ)

18 **Collagen Disease**
12 noon—Freehold Area Hospital
(Freehold Area Hospital and AMNJ)

19 **Current Therapy Update: 1980**
8:30 a.m.-12:30 p.m.—Landmark Inn, Woodbridge
(Philippine American Medical Society of NJ and AMNJ)

21 **Thyroid Disease**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

22 **Surgical Intensive Care Monitoring**
8 p.m.—Warren Hospital, Phillipsburg
(Warren Hospital and AMNJ)

23 **Patients/Family/Physician—in Cancer**
12 noon-1:30 p.m.—Englewood Hospital
(Englewood Hospital and AMNJ)

23 **Management of Spasticity**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

24 **Visiting Professor Medical Grand Rounds**
12:30-1:30 p.m.—Mountainside Hospital Montclair
(Mountainside Hospital and AMNJ)

NEUROLOGY/PSYCHIATRY

Mar.

3 **Recurrent Delusion in a Girl**
8-10 p.m.—111 Ridgewood Ave., Glen Ridge
(Essex Psychiatric Seminar and AMNJ)

3 **Neuroscience Conferences**
10 11:30 a.m.-12:30 p.m.—Bergen Pines
17 County Hospital, Paramus
24 *(Bergen Pines County Hospital and*
31 *AMNJ)*

4 **Psychiatric Case Conferences**
11 7:30-9:30 a.m.—Trenton Psychiatric
18 Hospital
25 *(Trenton Psychiatric Hospital and AMNJ)*

4 **Seminar on Law and Psychiatry**
11 3:30-5:30 p.m.—Rutgers Law School
18 *(Rutgers University Law School*
25 *and AMNJ)*

5 **Utilization of DSM-111 Criteria for Affective Disorders for Pharmocological Management**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

5 **DSM-111 and Its Impact on Psychiatry**
19 To be announced
1:30-3 p.m.—N.J. Medical School, Newark
(CMDNJ and AMNJ)

5 **Consultation-Liaison Psychiatry**

12 **Women as Patients—Changing Stresses and Parameters**

19 **Patients with Chronic Illness**
1-3 p.m.—Ancora Psychiatric Hospital
(Ancora Psychiatric Hospital and AMNJ)

5 **Child Psychiatry Case Conference**
12 8:30-10:30 a.m.—Trenton Psychiatric
19 Hospital
26 *(Trenton Psychiatric Hospital and AMNJ)*

6 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

6 **Psychiatric Lecture Series**
13 11 a.m.-12 noon—Greystone Park
20 Psychiatric Hospital
27 *(Greystone Park Psychiatric Hospital and AMNJ)*

7 **Psychiatric Lecture Series**
14 1:30-5 p.m.—Trenton Psychiatric
21 Hospital
28 *(Trenton Psychiatric Hospital and AMNJ)*

7 **Joint Meeting with the NJ Psychiatric Association**
8:30-10:30 p.m.—Ramada Inn, Clark
(NJ Psychoanalytic Society and AMNJ)

12 **Grand Rounds in Psychiatry and**
26 **Mental Health Science**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

Short-Term Dynamic Psychotherapies, Principles and Techniques.
14 9 a.m.-5:30 p.m.
15 9 a.m.-6 p.m.—Holiday Inn of Cherry Hill, Highway 70
(International Institute for Teaching and Research in Short-Term Dynamic Psychotherapy, Psychiatry Associates of Cherry Hill and AMNJ)

19 **Update on Laboratory Interpretations**
1:30 p.m.—Trenton Psychiatric Hospital
(AMNJ)

19 **Essentials of the Neurologic Examination**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital, AAFP and AMNJ)

19 **Social, Cultural and Intrapsychic Conflict in a Professional Woman**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(The Carrier Foundation and AMNJ)

19 **Special Problems in Neurology**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

19 **Palatal Myoclonus**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

Apr.

1 **Seminar on Law and Psychiatry**
8 Rutgers Law School, 15 Washington St.,
15 Newark
22 *(Rutgers University Law School and*
29 *AMNJ)*

1 **Psychiatric Case Conferences**
8 7:30-9:30 a.m.—Trenton Psychiatric
15 Hospital, Trenton
22 *(Trenton Psychiatric Hospital and AMNJ)*

2 **Patients with Chronic Pain**

16 **Dx and Rx of Borderline Patients**
1-3 p.m.—Ancora Psychiatric Hospital
(Ancora Psychiatric Hospital and AMNJ)

2 **Topic to be announced**

16 **Orientation of Public to Mental Health Services**

30 **Cannabis Users in Jamaica**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

2 **Ongoing Child Psychiatry Case**
9 **Conference and Lecture**
16 8:30-10:30 a.m.—Trenton Psychiatric
23 Conference
30 *(Trenton Psychiatric Hospital and AMNJ)*

3 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group)

3 **Psychiatric Lecture Series**
10 11 a.m.-12 noon—Greystone Park
24 Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

4 **Psychiatric Lecture Series**
11 1:30-5 p.m.—Trenton Psychiatric
18 Hospital
25 *(Trenton Psychiatric Hospital and AMNJ)*

7 **Neuroscience Conferences**
14 11:30 a.m.-12:30 p.m.—Bergen Pines
21 County Hospital, Paramus
28 *(Bergen Pines County Hospital and AMNJ)*

7 **Psychopathology of a Bisexual Girl**
8-10 p.m.—60 Melrose Place, Montclair
(Essex Psychiatric Seminar and AMNJ)

8 **Neurology**
11 a.m.—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

9 **Homosexuality**
8:30-10:30 p.m.—Guido's Restaurant, Hackensack
(North Jersey Psychiatric Society and AMNJ)

9 **Grand Rounds in Psychiatry and Mental**
23 **Health Science**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

16 **Special Problems in Neurology: A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

16 **Working with Parents of Adolescents with Alcohol and/or Drug Addiction Problems**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(The Carrier Foundation and AMNJ)

OBSTETRICS/GYNECOLOGY

Mar.

5 **Distinguished Lectures in Obstetrics/Gynecology**
8-10 p.m.—Coachman Inn, Cranford
(CMDNJ and AMNJ)

5 **Grand Rounds in Ob/Gyn**
12 3-5 p.m.—Rotates between College
19 Hospital, Newark Beth Israel
26 and St. Michael's Medical Centers, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

6 **Grand Rounds in Ob/Gyn**
13 4-5 p.m.—College Hospital, Newark
20 *(CMDNJ and AMNJ)*
27

21 **Ob/Gyn Amenorrhea**
12 noon—Freehold Area Hospital
(AMNJ)

Apr.

2 **Distinguished Lectures in Obstetrics/Gynecology**
8-10 p.m.—Coachman Inn, Cranford
(CMDNJ and AMNJ)

2 **Grand Rounds in Ob/Gyn**
9 3-5 p.m.—Rotates between College
16 Hospital, Newark Beth Israel
23 Medical Center, St. Michael's Medical
30 Center, Newark, St. Joseph's Hospital and Medical Center, Paterson and Jersey City Medical Center
(CMDNJ and AMNJ)

3 **Grand Rounds in Obstetrics and**
10 **Gynecology**
17 4-5 p.m.—College Hospital, Newark
24 *(CMDNJ and AMNJ)*

9 **Anesthesia in Toxemia of Pregnancy**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

PATHOLOGY

Mar.

11 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

11 **Pathology Lecture**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

Apr.

8 **Renal Biopsy Conferences**
12:30 p.m.-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

8 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

9 **Hemotherapy: 1980 Update**
1-2:30 p.m.—VA Medical Center Lyons
(VA Medical Center and AMNJ)

PEDIATRICS

Mar.

12 **Anesthesia for Common Pediatric Surgical Problems**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

17 **Neonatal Screening—Genetic/Metabolic**
12 noon—Montainside Hospital, Montclair
(Montainside Hospital and AMNJ)

22 **Modern Pediatric Ophthalmic Surgery**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

Apr.

1 **Recurrent Urinology Infections in Pediatrics**
9 a.m.—Freehold Area Hospital
(Freehold Area Hospital and AMNJ)

2 **Orthopedics in Children**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(St. Mary's Hospital and AMNJ)

RADIOLOGY

Mar.

12 **Body CAT Scanning**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

12 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Radiological Society of NJ and AMNJ)

19 **Dinner Meeting**
6:30-8:30 p.m.—The Manor, West Orange
(Radiotherapy Section, AMNJ)

20 **Topic to be announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Diagnostic Radiology Section for Northern NJ and AMNJ)

Apr.

9 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

12 **Major Symposium—Abdomen: The CAT vs. the ECHO**
9 a.m.-5 p.m.—Sheraton Inn, Newark Airport
(Radiological Society of NJ, NJ Institute of Ultrasound in Medicine and AMNJ)

GENERAL SURGERY

Mar.

3 **Distinguished Lecture Series in**
10 **Surgery and Grand Rounds**
17 4:30-5:30 p.m.—NJ Medical School,
24 Newark
31 *(CMDNJ and AMNJ)*

4 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

4 **Tumor Conferences**
11 11 a.m.-12 noon—Morristown
18 Memorial Hospital
25 *(Morristown Memorial Hospital and AMNJ)*

18 **Abdominal Aortic Aneurysms**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

21 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

25 **Endotracheal Tubes and Tracheal Injuries**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

Apr.

1 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

1 **Tumor Conferences**
8 11 a.m.-12 noon—Morristown
15 Memorial Hospital
22 *(Morristown Memorial and*
29 *AMNJ)*

7 **Distinguished Lecture Series in**
14 **Surgery and Grand Rounds**
21 4:30-5:30 p.m.—NJ Medical School,
28 Newark
(CMDNJ and AMNJ)

15 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ and AMNJ)

18 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

22 **Reconstructive Microsurgery and Replantation**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

SURGICAL SPECIALTIES (includes FNT, Neurosurgery, Ophthalmology, Orthopedic, Plastic, and Vascular Surgery.)

Mar.

5 **Vascular Surgery**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

Fifth Annual Orthopaedic Symposium
21 12 noon-4:30 p.m.
22 8 a.m.-4:30 p.m.—Rutgers Medical School, Piscataway
(NJ Orthopaedic Society and AMNJ)

Apr.

9 **Peripheral Vascular Disease**
1:30 p.m.—John E. Runnells Hospital, Berkeley Heights
(John E. Runnells Hospital and AMNJ)

22 **Peripheral Vascular Disease**
11 a.m.—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

23 **Cardiovascular Disease Pharmacology**
No time given—Hoffmann-LaRoche, Nutley
(AMNJ)

MISCELLANEOUS

Mar.

Quality Assurance/Risk Management
5 8:30 a.m.-4 p.m.—Governor Morris Inn, Morristown
7 8:30 a.m.-4 p.m.—Cherry Hill Inn
(NJ Foundation for Health Care Evaluation and AMNJ)

6 **Developmental Biology**
13 4-6 p.m.—Institute for Medical
20 Research, Copewood Street, Camden
27 *(Institute for Medical Research and AMNJ)*

29 **11th Annual Seminar—Sports Medicine**
Valley Hospital, Ridgewood
(The Valley Hospital)

Apr.

2 **Ethical Issues in Medical Practice**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

6 **Developmental Biology**
10 4-6 p.m.—Institute for Medical
24 Research, Camden
(Institute for Medical Research and AMNJ)

18- **Seminar for Physician Negotiators**
19 Cherry Hill Holiday Inn, Cherry Hill
(AMA Dept. of Negotiations)

OBITUARIES

Dr. George L. Becker, Sr.

George L. Becker, Sr., M.D., a member of our Passaic County component, died at his home in Fort Lauderdale, Florida on December 3. A native of South Jersey, born in 1902, Dr. Becker was graduated from Hahnemann Medical College in 1927 and had practiced proctology in Passaic County for many years. He was board certified in colorectal surgery and a Fellow of the International College of Surgeons. He had been chairman of the department of proctology at Paterson General Hospital and was on the staff of St. Joseph's and Barnert Memorial Hospitals in Paterson, at St. Barnabas Medical Center in Livingston, Valley Hospital in Ridgewood, and Fair Lawn Hospital in Fair Lawn. Dr. Becker was a founder and past president of the New Jersey Proctologic Society and had been president of the New York Society of Colon and Rectal Surgeons. During World War II, he served with the medical department of the United States Navy. A son, George L. Becker, Jr., is a neurosurgeon practicing in Fair Lawn. In 1977 Dr. Becker was a recipient of MSNJ's Golden Merit Award, indicating 50 years of practice.

Dr. Owen J. Cheevers

Owen J. Cheevers, M.D., just elected to membership from the Ocean County Medical Society in 1979, died suddenly on December 16, 1979, at West Jersey Hospital in Kearny. A native of New York City, Dr. Cheevers earned his medical degree from Downstate Medical Center in Brooklyn in 1937 and pursued a career in surgery in New York City until retiring less than a year ago to Lakewood where he had been practicing general medicine. He had been attending surgeon at St. Vincent's and St. Clare's Hospitals in New York, and was staff surgeon and former president and chairman of the medical board at St. Elizabeth's Hospital in Manhattan. Dr. Cheevers was a member of the American Society of Abdominal Surgeons and of the American Academy of Family Physicians. During World War II, he had served in the medical department of the AUS. Dr. Cheevers was 68 years old at the time of his death.

Dr. Irving Dolsky

On November 24 Irving Dolsky, M.D., of Linden, a member of our Union County component, died at his home. Born in 1908 and graduated from the University of Edinburgh, class of 1936, Dr. Dolsky was a practitioner of family medicine. He had been affiliated with Elizabeth General, St. Elizabeth's and Alexian Brothers Hospitals in Elizabeth.

Dr. Cyrus M. Gormley

Cyrus M. Gormley, M.D., died suddenly on December 9, 1979, at St. Joseph's Hospital and Medical Center,

Paterson, where he long had been a member of the staff. A native of Butler, New Jersey, Dr. Gormley was graduated from Georgetown University Medical School in 1931 and pursued a residency in medicine at Children's Hospital, Washington and Georgetown University Medical School and was an instructor in medicine at that institution until 1935 when he came to Butler to practice internal medicine. In 1946 he moved his offices to Paterson and six years ago to Hawthorne. Dr. Gormley was 71 years old at the time of his death. He was a member of the Passaic County Medical Society.

Dr. G. M. Leaman

On December 14, 1979, Granville M. Leaman, M.D., a member of our Essex County component, died at Paul Kimball Hospital in Lakewood. A native of Maryland, born in 1905, Dr. Leaman was graduated from the Medical College of the University of Virginia in 1934 and had practiced internal medicine in the Oranges for many years. He was formerly chief of pulmonary diseases at the Orange Hospital Center, and was a Fellow of the American College of Chest Physicians. Dr. Leaman retired from practice in 1972 and moved to Lakewood. He served in the medical department of the Army of the United States during World War II.

Dr. Lawrence H. Lief

A senior member of our Middlesex County component, Lawrence H. Lief, M.D., of Jamesburg, died on December 11, 1979. A native of New Jersey, born in 1905, Dr. Lief was graduated from New York University Medical School in 1929. He was a general practitioner who had been affiliated with St. Peter's and Middlesex General Hospitals in New Brunswick, and had held an appointment in the cardiac clinic at the Mount Sinai Hospital in New York City. Dr. Lief received MSNJ's Golden Merit Award in 1979, commemorating fifty years of service in the medical profession.

Dr. Henrik W. Locke

A member of our Camden County component, Henrik W. Locke, M.D., died at Zurbrugg Memorial Hospital in Riverside on November 4. A native of Camden, born in 1914, Dr. Locke was graduated from the University of Pennsylvania's School of Medicine in 1940. He served for 25 years as industrial physician for the New York Shipbuilding Company in Camden and also maintained a private practice in Moorestown until retirement in the early 1970's. Dr. Locke was a member of the Industrial Medical Association.

Dr. Francesco P. Magro

On October 10, Francesco P. Magro, M.D., a member of our Warren County component, died in Warren Hospital, Phillipsburg, following a myocardial infarction. A native of Italy, born in 1927, Dr. Magro had earned his medical degree from the University of Palermo in Italy, class of 1951. He had taken residencies in psychiatry at Central Islip State Hospital, Long Island, New York and Springfield State Hospital, Sykesville, Maryland, but pursued a career in general medicine first in Morrisville, Pennsylvania and then in Milford, New Jersey before moving to Phillipsburg the year before last.

Dr. Edwin J. O'Brien

On November 11, Edwin J. O'Brien, M.D., a member of the Union County component, died at his home in Naples, Florida. A native of New York City, Dr. O'Brien was graduated from Columbia University's College of Physicians and Surgeons in 1938. He practiced general medicine for a period and then pursued a career in surgery. He was affiliated in that department at Muhlenberg Hospital in Plainfield, where he maintained his offices. Dr. O'Brien had been working as an emergency room physician at the Naples Hospital in Florida. During World War II he was with the department of medicine of the United States Air Force.

Dr. Anthony F. Pernetti

One of Passaic County's well-known ophthalmologists, Anthony F. Pernetti, M.D., died at his home on December 4. A native of Italy, Dr. Pernetti came to the United States as a boy but returned to Italy for his medical education at the University of Bologna from which he was graduated in 1952. He pursued a career in ophthalmology and was associated with the Polyclinic Hospital in New York City, the Paterson Eye and Ear Clinic, and Paterson General Hospital. He was associated actively with the New Jersey Commission for the Blind. Dr. Pernetti was involved in civic affairs and had been school physician and on the board of health in Paterson. He was 75 years old at the time of his death.

Dr. Kasper J. Price

Kasper J. Price, M.D., of Elizabeth, a board-certified radiologist, died on December 1. A graduate of the University of Arkansas School of Medicine in 1939, Dr. Price was affiliated with St. Elizabeth and Elizabeth General Hospitals in Elizabeth and Rahway Hospital in Rahway, and was with the medical department of Standard Oil Company of New Jersey. He was a Fellow of the American College of Radiologists and a member of the North American Radiological Society. During World War II Dr. Price served with the United States Army Air Force. He was 66 years old at the time of his death.

Dr. Linton W. Turner

On October 19, Linton W. Turner, M.D., a member of the Cape May County component, died at his home after a prolonged illness. Born in 1921 and graduated from Temple University School of Medicine, class of 1946, Dr. Turner pursued a residency in internal medicine at the same institution and practiced in Philadelphia until coming to Ocean City in 1966. He had been assistant professor of medicine at Temple University Hospital in Philadelphia and chief of medicine at Roxborough Memorial Hospital in Philadelphia. In New Jersey he was affiliated with Shore Memorial Hospital at Somers Point. Dr. Turner was a Fellow of the American College of Physicians and a member of the American Rheumatism Asociation.

Dr. B. M. Wroblewski

At the grand age of 87, Benjamin M. Wroblewski, M.D., a member of our Camden County component, died on December 13, 1979 at his home. A graduate of Temple University Medical School, class of 1918, Dr. Wroblewski practiced general medicine in Burlington County for many years until retirement in 1970. He had been affiliated with West Jersey Hospital in Camden, and was a 1968 recipient of MSNJ's Golden Merit Award signifying 50 years of medical practice.

BOOK REVIEWS

Sneezing, Wheezing, and Scratching.

Doris J. Rapp, M.D. Los Altos, CA, ECR Collections, 1974. Pp. 25. Illustrated. (90¢ per copy for each 100 ordered).

This booklet is highly recommended as one that can be given out in the office. It can serve as a basis for understanding allergy and as a guide for patient education. It provides basic advice for the physician to give his patient and should be used by all physicians who treat the atopic patient.

The book is an excellent all-encompassing review in simple language and should be useful for patients who have allergies or those who are worried and wish to prevent allergies. It is must reading for families with really sick allergic children. It is profusely illustrated and easy to follow and can be used as a coloring book for children. There is much valuable information in it which is very practical and accurate.

As the author says in her foreword, "Sometimes, health information is available, but there is not enough time to explain things so they are well understood." She goes on to say, "This book will tell people simple ways in which they can prevent or relieve common allergic problems."

Dr. Rapp is to be congratulated for putting this helpful guide together. One can summarize it in her own words, "happy reading, healthy living" for the allergic child.

The book is available in English and in Spanish from ECR Collections, P.O. Box 615, Los Altos, California 94022.

Arthur A. Goldfarb, M.D.

The ABC's of Diabetes

Caryl Dow Jorgensen, R.N., and John E. Lewis, Ph.D. New York, Crown Publishers, 1979. Pp. 305 ($12.95)

The senior author, a nurse with training in patient education, collaborates with Dr. Lewis, a diabetic, to develop a comprehensive reference book for the layman. The book is divided into seven basic sections. The introduction explains the rationale for the book. Instructions are provided for its use.

The main section is a glossary of terms and is very complete. Many of the terms could have been omitted. Acetylcoenzyme and the Krebs cycle have little interest to the layman. Other terms and listings are open to question. They speak of candy as containing sugar and that it definitely should not be eaten. A list of foods that should be avoided is well outlined and statements imply that diabetics never should consume these items. Patients with proper instructions learn to substitute and exchange these foods under special occasions.

In various sections, the author describes diabetes as a serious illness or a chronic incurable disease. Professionals understand the pathophysiology of diabetes. If one describes diabetes in the early stages as a metabolic disorder, the patient will have less emotional trauma.

The authors have not updated their discussion on the classification of diabetes.

In describing foot care, the authors advised the use of gauze between the toes in place of cotton. The gauze will cause the same irritation. The use of teased lambs wool would be more desirable.

The discussion on hypoglycemia and its treatment is controversial. They state that hypoglycemic reactions must be avoided because of the danger of brain damage. Most reactions do not cause any pathology. A very mild reaction is encouraged indicating reasonable control. The use of orange juice with sugar is not contraindicated. The recommendation to use instant glucose when the swallowing reflexes are impaired is definitely contraindicated. The danger of aspiration is great. It recently has been shown that the glucose is poorly absorbed from the buccal mucosa.[1]

Appendix A gives an extensive list of abbreviations. Some of the cook books provided in Appendix B are outdated as are the suggested readings in Appendix C. Most laymen are not informed sufficiently to extract the most modern concepts in diabetic care.

The Directory is complete and should be of assistance to the patient. This comprehensive reference book is not for the average diabetic. It can serve as a source book for professionals preparing for patient educational programs.

Martin G. Blechman, M.D.

[1]Gunning RR: Bioactivity of instant glucose. *JAMA* 240:1611-1612, 1978.

THE JOURNAL of The Medical Society of NEW JERSEY

Rate Card effective January 1980

General Information

1. Issuance:

a. Frequency: Monthly

b. Issue date: 10th of month.

c. Mailing date: 10th of month.

2. Established: 1904

3. Organization Affiliation:

Official publication of
The Medical Society of New Jersey.

4. Circulation Data:

a. Controlled circulation to all members of the Medical Society of New Jersey. Members' subscription ($5) is included in Society dues. Rates for nonmembers $10, outside USA add $6.50 for postage. Single copies $1.

b. Annual percentage of subscription renewals: 100% of members.

c. Number of issues sent after subscription expiration: None.

5. Special Issues:

Index (December)

6. Editorial Content: Original scientific articles, special articles, case reports, editorials, medical news and meeting notices, trustees' minutes, state legislation, convention, medical insurance, PSRO, education, CME, etc.

7. Requirements for Acceptance of New Professional Products for Advertising.

All advertising subject to Publication Committee approval.

8. Requirement for Advertising Clearance:

All advertising subject to Publication Committee approval.

9. Advertising Acceptance of Nonprofessional Products or Services:

All advertising subject to Publication Committee approval

10. Policy on Placement of Advertising:

Advertising is interspersed throughout the publication. All R.O.B. ads are rotated each month. Advertising and editorial material is not placed on the same page.

11. Advertisers' Index: No.

12. Services to Advertisers:

Availability of editorial reprints: Please direct such requests to the Editor.

13. Staff

Editor: Arthur Krosnick, M.D.; Managing Editor: Marjorie D. Treptow; Executive Director: Vincent A. Maressa.

14. Circulation:

All members of the Medical Society of New Jersey.

15. Guaranteed Circulation:

All members of the Medical Society of New Jersey.

16. Circulation Verification:

Publisher's statement, postal receipt verification.

17. Rates Per Thousand:

Based on the 12-times rate of $295 and circulation of 10,000: $29.50.

18. Coverage and Market

a. Coverage: All members of The Medical Society of New Jersey, plus trade circulation. Circulation figures as of 6-1-79.

b.

GP	2,790
IM	1,597
GS	1,222
OBG	693
PED	582
DERM	170
ALL	68
UROL	181
OTO	368
PSYCH	547
OPH	322
CARD	78
GASTRO	28
ANES	234
TOTAL	9,687

c. Trade Circulation: 650

19. MEMBERSHIP CIRCULATION BY COUNTIES OF STATE OF NEW JERSEY

Atlantic	245
Bergen	1,152
Burlington	278
Camden	575
Cape May	53
Cumberland	140
Essex	1,828
Gloucester	116
Hudson	585
Hunterdon	79
Mercer	592
Middlesex	573
Monmouth	583
Morris	531
Ocean	260
Passaic	760
Salem	51
Somerset	180
Sussex	73
Union	850
Warren	69
Total	9,573

Guaranteed Circulation: 10,000

THE JOURNAL of The Medical Society of NEW JERSEY Rate Card Effective January 1980

Rates

20. Issuance:

a. Frequency: Monthly

b. Issue Date: 10th of month

c. Mailing date: 10th of month.

21. Closing Dates for Space:

a. Reservations: 1st of month preceding month of issue

b. Cancellations: 6th of month preceding month of issue

22. Agency Commission: 15%

23. Cash Discount: 2%, 10 days.

24. Rates:

	1 time	3 times	6 times	12 times
page	335	325	315	295
/2 page	180	170	160	150
/4 page	90	85	80	75
/8 page	55	50	45	40

Classified: Available to member physicians only.

25. Earned Rates:

Rates based on number of insertions used within one year, regardless of size. Space purchased by a parent company and subsidiaries is combined for accounting of earned rates.

26. Color Rates:

a. Standard color $120 plus earned black and white rate.

b. List of standard colors: AAAA standard red, green, blue, yellow, orange.

c. Matched Colors: $130 plus earned black and white rate.

d. 3-color rate: $390 plus earned black and white rate.

e. 4-color rate: $440 plus earned black and white rate.

Special 4-color rates are available to advertisers placing insertions in the Five Key State Journals (Illinois, New Jersey, New York, Ohio and Pennsylvania). Contact UMA.

27. Bleed: 10%

28. Inserts:

60 pound coated only.

29. Preferred Position Rates:

a. Preferred position rates quoted on request and subject to availability.

b. Should an advertiser insist on a specific position, production requirements may dictate premium rates.

30. Miscellaneous:

a. Contract requirements: All contracts subject to publisher's approval.

b. Statement of guarantee of uniform rates and discounts to all advertisers using same amount and kind of space: No exceptions to published rates.

c. Concessions: None

d. Rates subject to change with 90 days notice. Contracts accepted with understanding that rates will be guaranteed for three months beyond last issue closed. In the event of rate increase, contracts may be terminated without penalty of short rate.

Mechanical Requirements

THE JOURNAL is printed by offset.
Trim size: 8 x 11

31. Plate Sizes:

Page Unit	Dimensions
1 full page	7 x 10
1/2 horizontal	7 x 4-7/8
1/2 vertical	3-3/8 x 10
1/4 vertical	3-3/8 x 4-7/8
1/8 vertical	3-3/8 x 2-3/8

32. Bleed Sizes:

Page Unit	Dimensions
1 full page	8-1/8 x 11-1/4
1/2 horizontal	8-1/8 x 5-5/8
1/2 vertical	11-1/4 x 4-1/16

33. Insert Requirements:

Untrimmed size—8-1/4 x 11-1/4
Quantity—11,500

34. Paper Stock: Covers: 80-pound.
Inside pages: 45 or 50 pound.

35. Type of Binding: Perfect bound.

36. Halftone Screen: Up to 133 screen.

37. Reproduction Requirements:

Black and white positives and 2-color advertisements: negatives, camera-ready mechanicals, and art work acceptable.

4-color: film negatives or positive separations and press proof.

Offset film negatives or positives on .002 or .004 stable base materials must have register marks, center marks, and trim marks clearly indicated. Each negative must be marked for color and be right reading emulsion side down.

Additional Personnel Needs See Page 152

NEEMA EMERGENCY MEDICAL
—a professional association—

EMERGENCY MEDICINE POSITIONS: available with emergency physician group throughout Pa., N.Y., N.J., Mich. and Southeastern U.S. including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits towards board certification. Physician department directors also desired. Please send resume to:

NEEMA Emergency Medical
Ste 400
399 Market St.
Phila., Pa. 19106

In PA call
(215) 925-3511
Those outside of PA call
(800) 523-0776

SYCAMORE PROFESSIONAL BUILDING
Tinton Falls (Monmouth County)

One Suite now available (1100+ sq. ft.) in well established Medical Building. Suitable for any Medical Specialty. Beautifully landscaped on a busy thoroughfare, ample parking. Will finish to suit.

Call Dr. S. Furman
(201) 542-4433

PHYSICIAN
Emergency Room

Full time position available in active and progressive tertiary hospital in South Jersey. Board eligibility in emergency medicine required. Salary $45,000 per year. For consideration submit vitae in confidence to:

Box No. 177, c/o Journal MSNJ
2 Princess Road
Lawrenceville, NJ 08648

Equal Opportunity Employer

Ocean County
(Five miles south of Toms River)

THE SOLARIUM



Renting 704 square feet

Present Occupants: General Dentist
Internal Medicine

NEW PROFESSIONAL BUILDING
FOYER WITH SKYLIGHTS & PLANTS
CUSTOM LAYOUT
HOSPITAL PRIVILEGES
GROUND LEVEL
CENTRAL AIR
CARPETING
AMPLE PARKING

For more information
Call 269-3200

PHYSICIANS NEEDED

Ringwood (Bergen/Passaic County border) needs a Family Practitioner, an Internist, an Obstetrician, a Gynecologist, a Pediatrician and others.

Ringwood Professional Plaza, a Condominium will be ready for occupancy in June/July 1980.

Purchase, Lease/Purchase or Lease a suite or office. Up to 100% financing available to qualified Purchasers.

IDEAL FOR A NEW PRACTICE

For details please contact:
Ken Gluckman
Ringwood Professional Plaza
72 Hickory Road
Ringwood, New Jersey 07456
(201) 962-6300

MEDICAL DIRECTOR

Position of Chief of Medical Department and Director of Medical School Affiliated Medical Residency Program in approximately 400 bed general, non-profit hospital. Available July 1 or sooner. Active teaching program with multiple sub-specialty divisions in the department. Salary commensurate with qualifications. Apply to:

Medical Department Search Committee
c/o Mr. William T. Payne, Jr.
Administrator
Helene Fuld Medical Center
750 Brunswick Ave.
Trenton, N.J. 08638

CLASSIFIED ADVERTISEMENTS

CARDIOLOGIST—Board certified internal medicine and cardiology. Age 32. Available immediately. Box No. 181, c/o THE JOURNAL.

PHYSICIAN—Board eligible. Presently full-time faculty member. Seeking partnership or group practice opportunity. Available July 1980. Box No. 179, c/o THE JOURNAL.

UROLOGIST—Will consider all types of practice. Well trained at major N.Y.C. university center. Available July 1980. G. Rosenberg, M.D., 205 W. 15th Street, New York City, N.Y. 10011.

EMERGENCY ROOM PHYSICIAN—Full or Part time. Central New Jersey. Academically oriented. Modern facility. Financially rewarding. E.V. McGinley, M.D., (201) 277-0441.

PEDIATRICIAN—To join established practice in Bergen County in July 1980. Board eligible or certified. Excellent opportunity. Write Box No. 175, c/o THE JOURNAL.

PEDIATRICIAN—To join two-man Pediatric Group. Board eligible or certified. Ideal opportunity in excellent community. North Jersey, 20 minutes from New York City. Full time. Send Curriculum Vitae to Box No. 180, c/o THE JOURNAL.

PHYSICIAN—Ob/Gyn—Two mornings a week. To work with woman physician. Kinnelson Medical Center. Kinnelson, N.J. (201) 838-0188.

ALLERGY PRACTICE—Retiring, 35 years. Equipment also for sale. Beautiful office, professional building, suburban Essex County. Liberal terms. Will introduce. Send resume. Write Box No. 178, c/o THE JOURNAL.

GENERAL MEDICAL PRACTICE—Unexpected availability of busy general medical practice and completely equipped office. (201) 521-0881.

OFFICE/HOME—FOR SALE—Union County. Elegant, modern, split level home-office with private entrances in affluent area. Equipped office with x-ray. High net Family Practice, chiefly Internal Medicine. Retiring. Near seashore, New York City. Good schools. Hospital 10 minutes. Write Box No. 172, c/o THE JOURNAL.

OFFICE SPACE—Medical office space, new and fully equipped. Part/full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE TO SHARE—Bergen County. Fully equipped for elective surgery with operating and recovery. Ideal for Eye, ENT, Plastic. In Fort Lee. Convenient to all northern Jersey, New York, Westchester and Long Island. Modern skyscraper, private entrance, parking. Will subdivide to suit. Write Box No. 176, c/o THE JOURNAL.

OFFICE SPACE—Kearny, New Jersey. Medical Office suite available equipped with x-ray. Eight rooms plus darkroom and laboratory space. Suitable for single or group practice. Current physician leaving. Highly desirable ground level location with two private entrances. Call (201) 991-3718.

OFFICE SPACE—Moorestown, N.J. Renting custom medical offices built to suit. Solar heated medical building near Route 38 and 295 and Philadelphia. (609) 235-2651.

PROFESSIONAL OFFICE SPACE—For Rent, West Caldwell, Essex County. 5000 square feet, built to suit. Excellent location. Ample parking spaces. Call (201) 575-1658 or 227-7878.

NEEDED—OFFICE SPACE—Psychiatrist needs part-time office space. One/two days a week. Prefer Union, Middlesex or Somerset counties. Dr. H.W. Schein (201) 240-5655.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

a MINIRESIDENCY in occupational medicine

COLLEGE OF MEDICINE & DENTISTRY OF N. J.
DEPT. OF COMMUNITY MEDICINE
RUTGERS MEDICAL SCHOOL
Piscataway, N. J. 08854

PURPOSE:
To Provide a background in Occupational Health. To aid in obtaining board eligibility and certification, (approval applied for). To teach what was not taught in medical school. To bring you the latest advances. To provide continuing education, (90 hours credit in Class 1 for the Physicians Recognition Award).

TIME: From June 2 – June 20, 1980 / 15 weekdays daily from 8:30 – 4:30, 6 evening classes Tuesdays and Thursdays 6:30 – 8:30.

SUBJECTS:
Epidemiology and Statistics, Toxicology – Neurotoxicity, Industrial Hygiene, Occupational Diseases (Dermatology, Ophthalmology, Psychiatry), Infectious Diseases, Immunology, Hepatology – Nephrology, Public Health Administration, Medical Department Administration, Ergonomics, The Woman in the Workplace, Disability Evaluation – Stress Testing, Ionizing Radiation.

TUITION:
$800. for full course / $150. for any selected session of 2 days

FOR INFORMATIDN CONTACT:
J. Lieben, M.D. at above address or call

201-463-4772

NEED A 25% RETURN

If you are now receiving a 6%-12% return on your investment (CD's, saving certificates, Gov't. bonds, dividends, etc.) after taxes and inflation, you are losing over 3% per year on your dollars:
In today's economy you need a good hedge investment that has been doing in excess of 20% a year. We are one of the oldest investment companies of our kind in America—recommended by leading financial periodicals—and have been providing an investment that has been doing better than 25% per year for the past ten years. It has not gone down in value for 44 consecutive years. Approved for use by IRA, Keogh and Corporate retirement plans.

FOR INFORMATION CALL
(215) 667-9110
OR WRITE
A.D.C.
523 One Bala Cynwyd Plaza
Bala Cynwyd, Pa. 19004

PHYSICIANS

Limited Number of Resident/Fellowship Positions Available in Department of Navy

FELLOWSHIPS

Endocrinology at Bethesda & Oakland, First year level.
Infectious Disease at San Diego, First year level.
Infectious Disease at Bethesda, Second year level.
Pulmonary Medicine at Bethesda, First year level.
Cardiovascular at Bethesda & San Diego, First year level.

RESIDENCIES

Anesthesia G-2, Oakland, Portsmouth & San Diego.
Family Practice G-2, Charleston, Jacksonville & Pensacola.
Internal Medicine G-4, Portsmouth & San Diego.
Pathology G-2, Oakland & San Diego.
Psychiatry G-2, Oakland.
OB/GYN G-2, Portsmouth.
Otolarygology G-2 & G-3, Oakland.
Nuclear Medicine G-2 & G-3, Oakland.
Neurology G-2, Bethesda.

BENEFITS: Salary $23-$36,000, depending on experience; relocation allowances; 30 days paid vacation; medical/dental & life insurance coverage; dependent's benefits; planned promotion included with a commission in the Naval Reserve.
PROCEDURE: Submit CV with letter of preference to:
TRENTON & SOUTH: LT JOHN D. RUDNICK, JR., DEPT. OF THE NAVY MEDICAL PROGRAMS, 128 N. BROAD ST., PHILADELPHIA, PA 19102 OR CALL COLLECT: (215) 597-9680/(215) 564-3820
NORTH OF TRENTON: LT KAREN FLAHERTY, DEPT. OF THE NAVY MEDICAL PROGRAMS, GATEWAY 1 BLDG.—RAYMOND PLAZA WEST AND MARKET STREET, NEWARK, N.J. 07102. CALL (201) 645-2109.

MEDICAL DIRECTOR

for an evolving Academic Psychiatric Center

Candidates should be Board Certified psychiatrists who have requisite qualifications for Associate or Full Professorship. Position requires ability to direct medical, professional, scientific and educational staff at a dynamic full service psychiatric hospital which is in the process of becoming a major academic psychiatric center in collaboration with University Hospital and Boston University School of Medicine.

This is a full-time position for an outstanding clinician with strong academic interests. As Medical Director, you will have the opportunity to expand the active, innovative and excellent patient care programs at our short term acute care J.C.A.H. approved facility and to direct the evolution of an outstanding hospital into a major academic center.

The facility is 20 minutes from downtown Boston. Send C.V., salary, history and job objectives to:



charles river hospital

A new Teaching Hospital of Boston University Medical Center

203 Grove St., Wellesley, Mass. 02181

An Affirmative Action Employer

RESIDENCY IN PHYSICAL MEDICINE AND REHABILITATION

Dynamic, young program with balanced academic and clinical emphasis under the supervision of 10 physiatrists. Three year program and integrated internship/residency with opportunity for research and pursuit of special interests both in medical school and private hospital settings. Stipends from $14,900 to $17,000 depending on qualifications. We will pay for visits in selected cases. Equal Opportunity/Affirmative Action Employer. Telephone or write for information to:

John F. Ditunno, Jr., M.D., Director
Department of Rehabilitation Medicine
Thomas Jefferson University Hospital
11th and Walnut Street
Philadelphia, Pa. 19107
Telephone: (215) 928-6573

Picture yourself as an Air Force Physician

Consider an excellent income without overhead cost or red tape. Thirty days of paid vacation each year. Associates to care for your patients while you're away. Continued professional education. An income that continues if you're ill. Medical care for yourself and your family. And, if you qualify, a lifetime retirement income equivalent to half your base salary after only 20 years of active duty.

Additionally, well-equipped and well-staffed hospitals and clinics provide an excellent environment for your profession. And we know that's important to you.

Put yourself in the picture of good health care in the Air Force Medical Service.

For more information, contact:

Northern NJ
Capt. Richard T. Chamberlain
USAF Medical Recruiting
376 Hamburg Turnpike
Wayne, NJ 07470

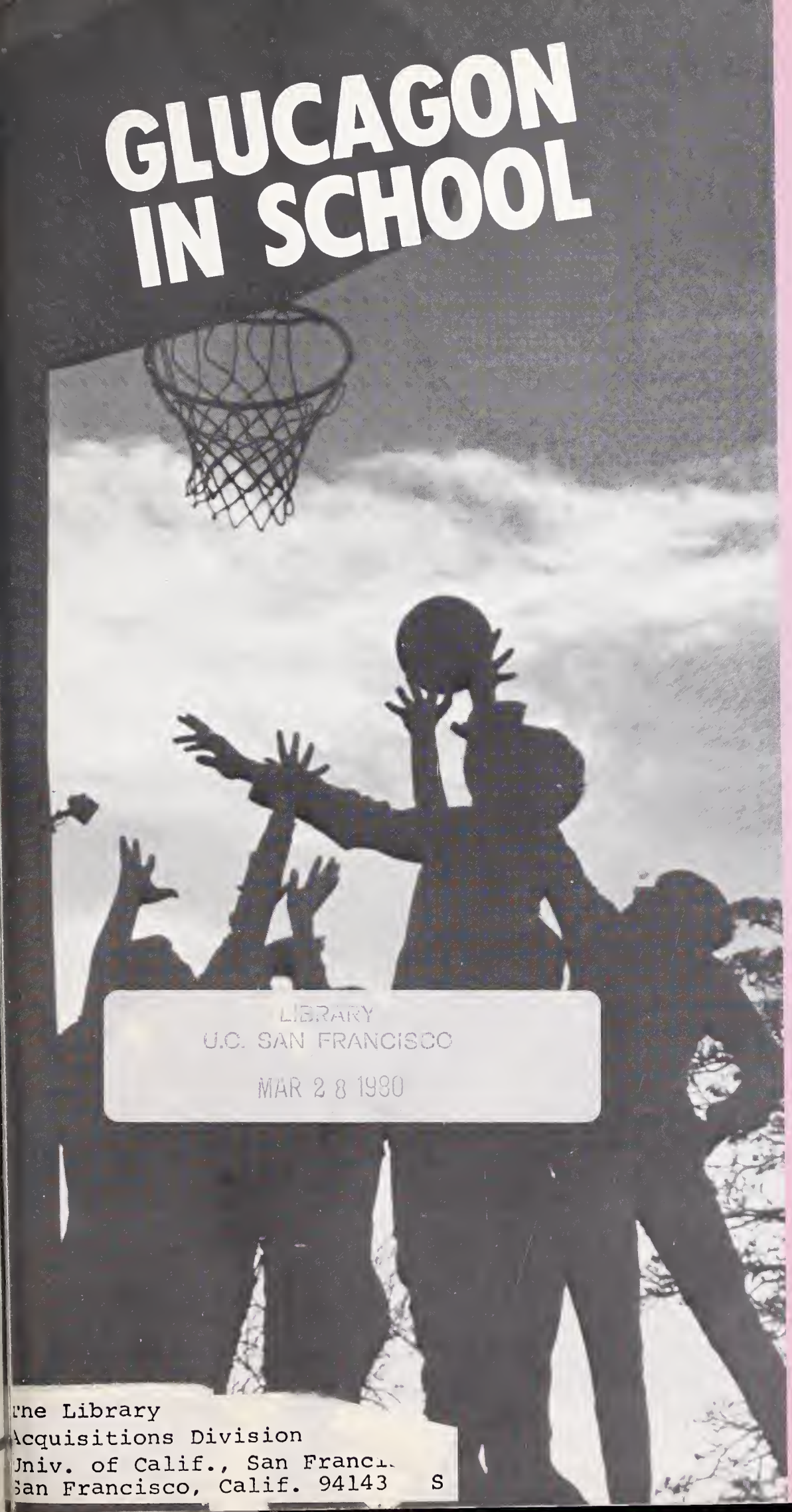
Southern NJ
Capt. Marty Csercsevits
USAF Medical Recruiting
2201 Rt. 38, Suite 730
Cherry Hill, NJ 08002

Air Force. A great way of life.

March 1980

Journal of the Medical Society of New Jersey

GLUCAGON IN SCHOOL



LIBRARY
U.C. SAN FRANCISCO
MAR 2 8 1980

Therapy of Portwine Stains
Bard Cosman, M.D.

Artificial "Hair" Implantatio
R. B. Bloomenstein, M.D.

Laser Therapy of Glaucoma
I. H. Jacobs, M.D.
A. A. Cinotti, M.D.

National Health Insurance
Hon. H. A. Williams, Jr.

Complete Table of Contents on Page 156

The Library
Acquisitions Division
Univ. of Calif., San Franci.
San Francisco, Calif. 94143 S

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____

only BRONKODYL®

brand of

theophylline, USP (anhydrous)

is 100% micro-pulverized, anhydrous theophylline, in capsules



- Bioavailability equal to an elixir[1]
- Achieves blood levels rapidly[1]

[1] Tinkelman, D.G., Carroll, M.S., Vanderpool, G., Jones, M.: The bioavailability of theophylline in elixir and micro-pulverized forms. Medical Challenge 10:24-26, 1978.

BREON

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016

BRONKODYL®

BRAND OF THEOPHYLLINE, USP (ANHYDROUS)

BRIEF SUMMARY: **Before prescribing, please consult complete prescribing information, a summary of which follows:**

INDICATIONS: For relief and/or prevention of bronchospasm associated with bronchial asthma, chronic bronchitis and emphysema.

CONTRAINDICATIONS: Hypersensitivity to any of its components.

WARNINGS: Theophylline should be used with caution in children and in others who are currently taking bronchodilator products, especially in rectal dosage form, which may contain theophylline or related drugs.

Status asthmaticus is a medical emergency. Addition of corticosteroids and other medications to bronchodilator therapy may be required.

Serum theophylline levels should be monitored at appropriate intervals for dosage adjustment. High serum levels of theophylline and resultant toxicity may occur with conventional doses in patients with decreased theophylline clearance as found with cardiac failure, liver disease, chronic obstructive pulmonary disease, and in geriatric patients.

Early signs of theophylline toxicity, such as nausea and restlessness may not occur prior to convulsions or ventricular arrhythmias. Pre-existing arrhythmias may be worsened by theophylline.

Usage in Pregnancy: Theophylline safety in pregnancy has not been established. Use of Bronkodyl during lactation or in women of childbearing potential requires that possible benefits of the drug be weighed against possible hazards to fetus or child.

PRECAUTIONS: Smokers may require larger doses of theophylline because of a shorter half-life in these patients.

Theophylline should not be administered concurrently with other xanthines.

Caution should be observed in patients with cardiac disease, severe hypoxemia, hypertension, hyperthyroidism, acute myocardial injury, cor pulmonale, congestive heart failure, liver disease, peptic ulcer, and in the elderly and neonates. Patients with congestive heart failure in particular may have markedly prolonged serum half-lives of theophylline.

ADVERSE REACTIONS: Most adverse reactions to theophylline are seen with serum levels exceeding the therapeutic range. *Gastrointestinal:* nausea, vomiting, epigastric pain, hematemesis, diarrhea. *CNS:* headache, irritability, restlessness, insomnia, reflex hyperexcitability, muscle twitching, clonic and tonic generalized convulsions. *Cardiovascular:* palpitations, tachycardia, extrasystoles, flushing, hypotension, circulatory failure, ventricular arrhythmias which may be life-threatening. *Respiratory:* tachypnea. *Renal:* diuresis, albuminuria. *Other:* hyperglycemia, inappropriate ADH secretion.

Drug Interactions: Toxic synergism with ephedrine and other sympathomimetic bronchodilators may occur.

OVERDOSAGE Treatment:

A. If potential oral overdose is established and seizure has not occurred: 1) Induce vomiting 2) Administer a cathartic. 3) Administer activated charcoal.

B. If patient is having a seizure: 1) Establish an airway. 2) Administer O_2. 3) Treat the seizure with intravenous diazepam, 0.1 to 0.3 mg/kg up to 10 mg. 4) Monitor vital signs, maintain blood pressure and provide adequate hydration.

C. Post-seizure coma: 1) Maintain airway and oxygenation. 2) If a result of oral medication, follow above recommendations to prevent absorption of drug, but intubation and lavage will have to be performed instead of inducing emesis, and the cathartic and charcoal will need to be introduced via a large bore gastric lavage tube. 3) Continue to provide full supportive care and adequate hydration while waiting for drug to be metabolized. In general, the drug is metabolized sufficiently rapidly so as to not warrant consideration of dialysis.

HOW SUPPLIED:

Bronkodyl 100 mg, brown and white capsules in 100's	Code 1831
Bronkodyl 200 mg, green and white capsules in 100's	Code 1833

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
PRESIDENT-ELECT
Augustus L. Baker, Jr., M.D. (Morris) Dover
FIRST VICE-PRESIDENT
Armando F. Goracci, M.D. (Gloucester) Woodbury
SECOND VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
IMMEDIATE PAST-PRESIDENT
Charles S. Krueger, M.D. (Burlington) Mount Holly
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
James S. Todd, M.D. (1980) (Bergen) Ridgewood
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Palma E. Formica, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1980) (Cumberland) Bridgeton
William Greifinger, M.D. (1981) (Essex) Belleville
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Alexander Kovacs, M.D. (1981) (Union) Scotch Plains
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1980) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Vacancy
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1980) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1980) Haddonfield
Karl T. Franzoni, M.D. (1980) Trenton
Henry J. Mineur, M.D. (1980) Cranford
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

March 1980

Publication Committee

John F. Marshall, M.D., *Chairman*
Julio C. del Castillo, M.D.
Paul J. Hirsch, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Donald S. Kwalick, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 909. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies, $1. Address communications to *The Journal*, MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.

How we made Bell System Yellow Pages advertising 21% more effective.

One reason for the success of your 1979 advertising program was our advertising program.

A study conducted in New Jersey by a major independent research organization showed that usage of the Bell System Yellow Pages increased 21% in 1979.*

That means if you were a Bell System Yellow Pages advertiser, your ad program could have been 21% more effective than the previous year.

So what can you expect in 1980?

More of the same.

Because we'll be using, basically, the same ads in 1980.

"100% noted.
53% likelihood of remembrance.
56% unaided recall."**



"All four ads tested were high performers in terms of establishing top of mind awareness."**





"Nearly total understanding of at least one major message."**



"Main idea communication was immediate and powerful."**

They'll be running in major newspapers circulated throughout the state. Plus, for the first time, in six consumer magazines in New Jersey. Where the ads will be even more effective because they'll run in four-color.

Again in 1980, we'll be supplementing our print campaign with a statewide outdoor advertising campaign that ties in with something that everybody is worried about these days.

The gas crisis.

Now that you've heard about our ad program for 1980, what about your ad program?

*Peter Honig Associates, White Plains, New York.
**Telcom Research, Inc., Teaneck, New Jersey.

Bell System Yellow Pages

March 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

Volume 77
Number 3

Pages 153-232

160 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

163 Glucagon in School

164 B.M.E. Rule 13:35-6.6—The Prescription Blank

ORIGINAL ARTICLES

167 Argon Laser Therapy of Portwine Stains
Bard Cosman, M.D., New York

179 Lipoma of the Uterus
István A. Gáspár, M.D., Englewood

STATE OF THE ART

187 Laser Therapy of Glaucoma
I. H. Jacobs, M.D.; A. A. Cinotti, M.D., Newark

CASE REPORTS

191 Extensive Infection from Artificial "Hair" Implantation
Richard B. Bloomenstein, M.D., Englewood

194 Relapse of Whipple's Disease After Short-Term Antibiotic Treatment
W. M. Battle, M.D.; H. S. Kroop, M.D.; A. J. DiMarino, Jr., M.D.; E. Redfield, M.D., Woodbury

197 Chronic Granulocytic Leukemia in Patient Receiving Lithium Carbonate
P. Schottlander, B.A.; P. A. Litka, M.D.; Y. S. Arkel, M.D., Newark

199 Rupture of Thoracic Aneurysm into Right Pleural Space
R. M. Abel, M.D., J. Alpert, M.D., D. Fisch, B.A., I. Gielchinsky, M.D., V. Parsonnet, M.D., Newark

THE ELECTROCARDIOGRAM

203 Chaotic Atrial Mechanism
Edwin L. Rothfeld, M.D., Newark

204 **HELP FOR IMPAIRED PHYSICIANS**

205 **THERAPEUTIC DRUG INFORMATION**

207 **YOUR SENATOR SPEAKS**
National Health Insurance
The Honorable Harrison A. Williams, Jr.

209 **ANNUAL MEETING HOUSING APPLICATION**

210 **ANNUAL MEETING—DAILY SCHEDULE**

DOCTORS' NOTEBOOK

211 Trustees' Minutes: January 20, 1980

213 CMDNJ Notes

214 Report from the Foundation

215 Physicians Seeking Location in New Jersey

218 Report of the Nominating Committee

219 **LETTER TO THE JOURNAL**

219 **CME CALENDAR**

225 **OBITUARIES**

228 **BOOK REVIEWS**

Cover

We are grateful to John A. Galloway, M.D., Senior Clinical Pharmacologist, Lilly Laboratories for Clinical Research, William Wishard Memorial Hospital, Indianapolis, and the Eli Lilly Company for providing the photograph for our cover.

Note Dates and Location →

214th Annual Meeting
May 10-13, 1980
Meadowlands Hilton, Secaucus

At any other hospital in our state, Michael Monaco would be confined to an Intensive Care Unit.



At New Jersey Rehabilitation Hospital, he can go almost anywhere.

As a result of an injury, Michael Monaco cannot breathe without mechanical assistance. Thanks to portable ventilators and a specially-trained staff headed by NJR Medical Director Bertrand J. Bensam, MD (formerly Chief of the Howard A. Rusk Respiratory Rehabilitation Center), Michael is participating in all phases of rehabilitation. His future is no longer limited to an institution.

Rehabilitation Medicine:
Another way of saying "It can be done."

New Jersey Rehabilitation Hospital
240 Central Avenue, East Orange, NJ 07018 • 201-673-1860

Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics Inc.

Information for Readers and Contributors

The Journal, the official organ of the Medical Society of New Jersey is published monthly under the direction of the Committee on Publication. Released the first week of the month, a copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles*, based on research, original concepts relative to epidemiology of disease, and treatment methodology; *case reports*, based on unusual clinical experiences; *review articles; clinical notes*, succinct items on some aspect or new observation or technique of a case experience; and *special articles*, which may include evaluations, policy and position papers, and reviews of non-scientific subjects. Material submitted here is for exclusive publication in *The Journal*. Upon request of the author, the Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal*. The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal, MSNJ.*"

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten double-spaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editors. Authors must understand that the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data or special photographs).

Tables and Illustrations—Tables must be typewritten, double-spaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page—The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References, which should not exceed 35 citations except in review articles, should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed double-spaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus*.

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis*. New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Manuscript Review Board, who render an opinion to the Editor. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar may not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal*, MSNJ, 2 Princess Rd., Lawrenceville, N.J. 08648.

for "cardiac separation"...



Although over 80% of post-coronary patients can resume normal marital sexual activity, fear of anginal pain often results in "cardiac separation" between patients and their families.

You can help minimize "cardiac separation" with a program of counseling and often, with a prescription for Cardilate® (erythrityl tetranitrate).

Cardilate® increases exercise tolerance, helps patients return to more normal levels of activity—including sexual activity. Sublingually, Cardilate begins to work within 5 minutes, eliminating or reducing frequency and severity of anginal pain for up to 2 hours.

counsel & Cardilate® (erythrityl tetranitrate

TE® (ERYTHRITYL TETRANITRATE)

DNS: Cardilate (Erythrityl Tetranitrate) is intended for the prophylaxis and long-term treatment of patients with frequent or anginal pain and reduced exercise tolerance associated with angina pectoris, rather than for the treatment of the acute angina pectoris, since its onset is somewhat slower than that of nitroglycerin

NDICATIONS: Idiosyncrasy to this drug

: Data supporting the use of nitrates during the early days of the acute phase of myocardial infarction (the period during ical and laboratory findings are unstable) are insufficient to establish safety

IONS: Intraocular pressure is increased, therefore, caution is required in administering to patients with glaucoma to this drug, and cross-tolerance to other nitrites and nitrates may occur

REACTIONS Cutaneous vasodilation with flushing Headache is common and may be severe and persistent Transient f dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occa- velop This drug can act as a physiological antagonist to norepinephrine, acetylcholine, histamine and many other agents nal individual exhibits marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, restlessness, pallor, perspiration and collapse) can occur even with the usual therapeutic dose Alcohol may enhance this effect. Drug rash and/or exfoliative dermatitis may occasionally occur

DOSAGE AND ADMINISTRATION

Oral/Sublingual Tablets: Cardilate (Erythrityl Tetranitrate) may be administered either sublingually or orally Therapy may be itiated with 10 mg prior to each anticipated physical or emotional stress and at bedtime for patients subject to nocturnal attacks dose may be increased or decreased as needed

HOW SUPPLIED:

CARDILATE (Erythrityl Tetranitrate) TABLETS (Scored)
for ORAL or SUBLINGUAL USE 5 mg Bottle of 100:
10 mg Bottles of 100 and 1000, 15 mg Bottle of 100

Reference. 1 Hellerstein HK, Friedman EH Sexual activity and the postcoronary patient Arch Intern Med 125 987 1970

Burroughs Wellcome Co.,
Research Triangle Park, North Carolina 27709

ONE HUNDRED YEARS WELLCOME

Featuring: Professional Liability: The Plaintiff's Perspective February: The Professional Liability "Overload"

PROFESSIONAL LIABILITY: THE PLAINTIFF'S PERSPECTIVE

Myron W. Kronisch, Esq., President
Association of Trial Lawyers of America—NJ

The "tort system," of which malpractice is a part, serves a very useful function in our society. It provides remedies for injuries which result from another's conduct, and has been called the glue which holds our society together. Each of us can help to make it work better by understanding the viewpoints, the prejudices and the concerns of the others involved in the process.

Every physician should be able to accept the fact that he is human and therefore capable of mistakes, and that his interests often are served best when he is able to admit a mistake to himself and to his patient. Although most physicians "do their best," medical negligence does occur, and when it does it should be recognized and admitted, if it has caused injury.

A malpractice suit against a physician, though understandably disconcerting, can be a healthy, productive event if the physician realizes that the lawsuit is not a charge that he is incompetent but rather that in the specific case under review, he failed to act as he ordinarily should have. The suit provides the physician with the opportunity to review his practices and, hopefully, improve those which are found to be below standard. The result is better medical care for the public.

The general attitude of physicians toward malpractice litigation is one of hostility. The physician feels hurt and resentful. He looks for someone upon whom to put the blame and he turns angrily upon the lawyers. He distrusts lawyers, questions the motives of plaintiffs' lawyers, is openly hostile to their methods, and distrusts the judicial system.

There is understandable emotional stress involved in a claim of malpractice. Unfortunately, the concern usually is multiplied by misconceptions. One of the greatest relates to the contingent fee charged by the lawyer in almost all medical malpractice cases. The contingent fee is, in fact, an important protection to the physician against prosecution of claims having no merit. If a claim is baseless the attorney is wasting his time and thousands of dollars of his client's money which must be advanced for costs of litigation.

Every study of medical malpractice has concluded that medical injuries are at the root of the malpractice problem. If this is so, every effort should be made to reduce the total number of medical injuries and adverse results of treatment, thereby not only reducing the potential number of claims, but improving medical outcomes and the quality of care in general.

The most effective way of reducing the frequency of injuries and other adverse medical outcomes is the development of intensive medical injury prevention programs in the place where more than 80 percent of malpractice claims arise, that is, in health care institutions, beginning with hospitals.

Such programs should focus on every potential source of injury to patients, including medication errors, slips and falls, faulty medical equipment, inadequate supervision of personnel, breakdowns in communication, unnecessary surgery, inadequate record-keeping, and other sources of potential harm.

As new and more sophisticated injury-prevention methodologies are developed, they should be expanded to include medical-injury prevention in physicians' offices and other non-institutional settings. There is unquestionable need for improvement in basic and continuing education of health providers, licensure requirements, professional discipline, specialty board certifications, and other health care quality control measures. While achievements in many of these areas are already at a high level, there is room for improvement.

There is also room for improvement on the part of attorneys who handle medical malpractice claims. Representatives of Medical Inter-Insurance Exchange and members of The Association of Trial Lawyers of America-New Jersey met recently in an attempt to improve the manner in which medical malpractice claims are being handled. As a result of that meeting several points were agreed upon to minimize the expense to your insurance company and to improve communications between the patient's attorney and your carrier. They included the following:

- After having reviewed and evaluated a claim, plaintiffs' attorneys should afford Medical Inter-Insurance Exchange ninety days within which to investigate the claim before suit is actually filed;
- Punitive damages will not be included randomly in the Complaint;
- Unnecessary defendants will not be named in the Complaint; defendants who cannot be specifically identified will be listed as Jane Doe-John Doe entities;
- In the event that Medical Inter-Insurance Exchange indicates its willingness to settle a claim, but an impasse arises concerning damages, the claim may be submitted to a legal arbitrator agreed to by the parties who may decide whether the results of the arbitrator's decision will be binding.

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

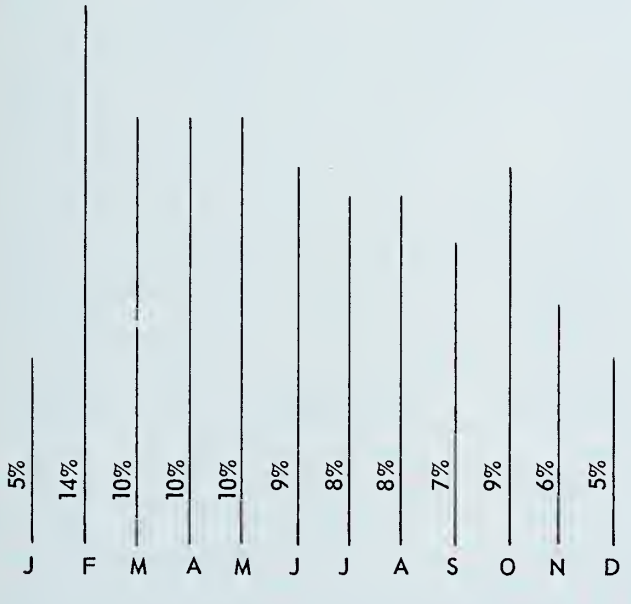
This program of arbitrating the amount of damages where liability has been agreed upon was commenced with two cases on January 9th. Immediately following receipt of the recommendation of the arbitrator (a highly respected retired judge), both cases were settled.

This type of progress, and the reduction for two years in medical and hospital insurance premiums, vindicates the judgment of the Medical Society and its officers in initiating your program of self-insurance. These improvements in the handling of malpractice claims have been achieved without legislative "tort reform"; that is, without taking away your patient's access to the courts.

I like to think that ATLA's active support for the Medical Inter-Insurance Exchange concept and its programs were of some value in the realization of these improvements. In the final analysis, both physicians and attorneys who practice in the tort area are dedicated to common goals: improvement in the delivery of health care to the members of our community and the minimization of costs, delays and inconvenience to all parties involved in malpractice claims.

FEBRUARY: THE PROFESSIONAL LIABILITY "OVERLOAD"

The following graph of reported incidents of alleged professional liability dramatically depicts February as being the principal month for possible suits:



The Medical Inter-Insurance Exchange of New Jersey surveyed the number of reported incidents (1605) over the past three years of operation. Findings revealed February as representing the highest percentage (14%) of reported incidents, while January and December represented the lowest percentage (5%) of reported incidents.

Several factors which might tend to contribute to February's high rate of incidents are: (1) patients electing hospitalization after the holidays, and prior to the onset of spring, (2) physicians responding to a heavier schedule of patient contacts causing physicial fatigue and inattentiveness to details, and (3) increased demands on hospital facilities and personnel causing a greater risk of oversight and error.

As electrical power companies have used the term "overload" to express a period of excessive use, perhaps physicians should consider February as an "overload" month and schedule elective surgery and other hospital related procedures during periods of less stress to the hospital system. In any event, physician awareness of February as the month with the highest percentage of professional liability incidents should warrant behavior appropriate to deal with this striking phenomenon.

DID YOU KNOW

. . . The U.S Supreme Court, in a 6 to 3 decision, ruled that appellate courts have been far too generous in their interpretation of the statute of limitations involving medical malpractice cases. Appellate courts have held that the statute begins when the plaintiff realizes that medical treatment has caused aninjury which might be negligent, a fact that could take years to uncover. The ruling applies only to the two-year statute of limitations written into the *Federal Tort Claims Act*. "It would be difficult, indeed, not to apply the same rule to medical and health claims arising under other statutes," said Justice Byron R. White *(Medical World News,* December 24, 1979).

. . . The Supreme Court has directed the Client's Security Fund to conduct a survey among members of the New Jersey Bar to determine the number of attorneys in private practice presently covered by malpractice insurance. The results of the survey will be made available to the New Jersey State Bar Association to aid in its study of the feasibility of creating a "captive" insurance company to provide professional liability coverage for members of the bar. (*New Jersey Law Journal* December 20, 1979).

. . . "Though doctors still win many more malpractice trials than they lose, my perception is that judges and juries are becoming more prone to feel that any victim of an accident or injury is entitled to some compensation for pain and suffering," so stated Jack E. Horsley, J.D. in an article in the December 24, 1979 issue of *Medical Economics.*

. . . A.M. Best Company's list of 15 leading writers of medical malpractice insurance includes four doctor-owned companies: Medical Liability Mutual of New York,ranked 3rd; Illinois State Medical Insurance Services, Inc., ranked 9th; **Medical Inter-Insurance Exchange of New Jersey,** 12th; and Norcal Mutual Insurance Company, 14th.

DEPARTMENT ACTIVITIES

Since July the Department of Professional Liability Control has planned and conducted medicolegal seminars for the New Jersey Urological Society, the New Jersey Chapter of the American Academy of Pediatrics, the New Jersey Society of Plastic and Reconstructive Surgeons and the Medical Society of New Jersey Student Association of the College of Medicine and Dentistry of New Jersey. Evaluation forms completed by the participants have been most encouraging. Many of the comments received expressed a desire for more programs regarding medicolegal topics.



Four out of five N.J. doctors participate!

Physicians statewide have teamed up with Blue Shield of New Jersey in the battle to control healthcare costs.

Their participation is proof-positive of a genuine commitment to our common goal... the best medical care at the lowest possible cost.

It's probably been a while since you have talked with your Blue Shield professional relations rep. Join us. *Call 456-3250.*

Give your patients the benefit of the best.

Blue Shield
of New Jersey

Glucagon in School

A nine-year-old, insulin-dependent diabetic became sleepy in class. When she put her head on the desk the teacher sent her to the nurse, who then wasted an hour or more trying to reach the parents and the family physician; she ultimately contacted the school physician. By that time the child was difficult to arouse and twitching. The school physician suggested to the school nurse that she call an ambulance. On arrival at the emergency room of a nearby hospital, the youngster was convulsing and unresponsive. After intravenous glucose she gradually aroused, but was found to be hemiparetic and dysarthric. The latter problem, associated with headache and mental sluggishness, lasted several days.

What a pitiful situation! No one had made the slightest effort to treat this young diabetic when even the simplest remedy—a sweet drink at the onset—could have prevented a tragedy.

AN UNPRECEDENTED EFFORT

Through an unprecedented effort by representatives of the American Diabetes Association, New Jersey Affiliate, the CMDNJ-Rutgers Medical School, the New Jersey State Department of Health, the New Jersey School Nurses' Association, the New Jersey Nurses' Association, the Medical Society of New Jersey, and others, Education Commissioner Fred G. Burke was convinced to adopt a policy for local school districts to permit school nurses to administer glucagon subcutaneously to students suffering severe hypoglycemia. This is a major accomplishment which will require the participation of New Jersey physicians to be successful.

PATHOPHYSIOLOGY OF HYPOGLYCEMIA

When a child has a relative excess of insulin, whether the result of an overdose of the hormone, inadequate food intake, or inordinate exercise, the uptake of glucose by many cells, especially adipose tissue and muscle, increases to a great extent. In addition, there may be an initial decrease in hepatic glycogenolysis. The result is a fall in blood glucose level, which, when rapid, leads to a release of epinephrine from the adrenal medulla and pancreatic glucagon. These two hormones activate liver phosphorylase, which promotes the first stage of glycogen breakdown. This counter-regulatory event releases glucose from the liver into the general circulation and, when the insulin excess is relatively small, this homeostatic control mechanism is sufficient to alleviate the problem temporarily. With comparatively larger excesses of insulin, however, the blood glucose level continues to decline and liver glycogen becomes depleted.

The pharmacologic effects of the spontaneous release of epinephrine are well known and usually recognized promptly —tachycardia, tremor, diaphoresis—but, should a child fail to pay heed (for example, in the midst of a basketball scrimmage), the reduction in blood glucose then affects the brain, which relies almost exclusively on glucose for energy production. Paresthesias are quickly followed by confusion and neuromuscular incoordination, somnolence, bursts of clonic muscular responses and ultimately coma and grand mal seizures.

Hypoglycemia effectively produces an hypoxic encephalopathy due to reduced brain cell uptake of oxygen; this initially causes neuronal irritation, whose effects are coarse tremors, mental confusion and convulsions. If unchecked, this event is followed by neuronal depression which leads to lethargy and coma. Repeated or prolonged hypoglycemic attacks may produce petechial hemorrhages, edema of the brain and irreversible neuronal damage which can be responsible for permanently abnormal electroencephalograms, paresis or paralysis, loss of intellect and even personality changes.

The clinical events, i.e., both the signs and symptoms of hypoglycemia, depend on the *rate* of the fall in blood sugar, as well as the depth to which the level falls. When the drop is slow, the release of epinephrine may be dampened so the typical tachycardia, diaphoresis and agitation may not appear. Furthermore, the brain of the young may be somewhat resistant to the sequence of events—perhaps by utilization of alternate energy sources—and headaches and personality changes alone may present for some time before coma ensues. Nurses and physicians should realize that typical hypoglycemic events can occur with a rapid fall, e.g., from 400 mg/dl to 80 mg/dl, even though the blood glucose level is normal.

TREATMENT OF HYPOGLYCEMIA

Since the consequences of insulin excess are all due to the lack of blood glucose, almost any source of rapidly absorbed oral carbohydrate—sugar, syrup, candy, sugar-containing soda, or the commercially available glucose preparation (Instant Glucose®, Reactose®, Glutose®)—will halt the chemical events. Where these simple remedies are either overlooked or fail to work, an injection of glucagon is the next order of treatment. This polypeptide, derived from the pancreatic alpha cells, is commercially available from any pharmacy.* All parents of diabetic children should be familiar with its use and have it on hand. Glucagon is supplied in a small box with two vials; one contains a white powder—the lyophilized glucagon—and the other is a diluent. The dose is one mg. and it can be injected subcutaneously, although it works faster when injected into a muscle. One need not be

*Glucagon for Injection, USP, Eli Lilly and Company

concerned about accidentally injecting glucagon into a blood vessel, and, even if given when hypoglycemia is not present, it will do no harm. The hypoglycemic patient will respond in five to twenty minutes and then should be given supplemental oral carbohydrate to restore the liver glycogen and prevent secondary hypoglycemia.

To be effective, this program—"Glucagon in School"—will need written instructions from the child's personal physician to the school nurse to administer glucagon to the student suffering from severe hypoglycemia. Parents will need to sign permission slips and supply the glucagon to the school nurse. The New Jersey Nurses' Association has gone on record as saying "that any professional nurse is qualified to carry out a doctor's order for glucagon." On March 27, 1979, the Medical Society of New Jersey resolved "that school nurses be permitted to administer medication when ordered by a physician and upon specific instructions by that physician."

The sponsors of the "Glucagon in School" program are planning a series of in-service training sessions for school nurses on this subject. It is now up to the physicians of New Jersey to prescribe glucagon and to instruct the parents and school nurses in its use.

A.K.

B.M.E. Rule 13:35-6.6— The Prescription Blank

All physicians are reminded that standard prescription blanks are required in New Jersey. They must include notice of generic drug availability. The approved form of the blank is as follows:

N.J. Physician, M.D.
1001 State Street
Trenton, N.J. 08618

DEA No. NJ12345

Name _____ Age _____

Address _____ Date _____

℞

Substitution Permissible _____ initial

Do Not Substitute _____ initial

Refill _____

_____ M.D.

You should be aware that failure to initial the "do not substitute" part makes it mandatory for the pharmacist to substitute, if an approved generic drug is available and the patient accepts the generic substitute. A.K.

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

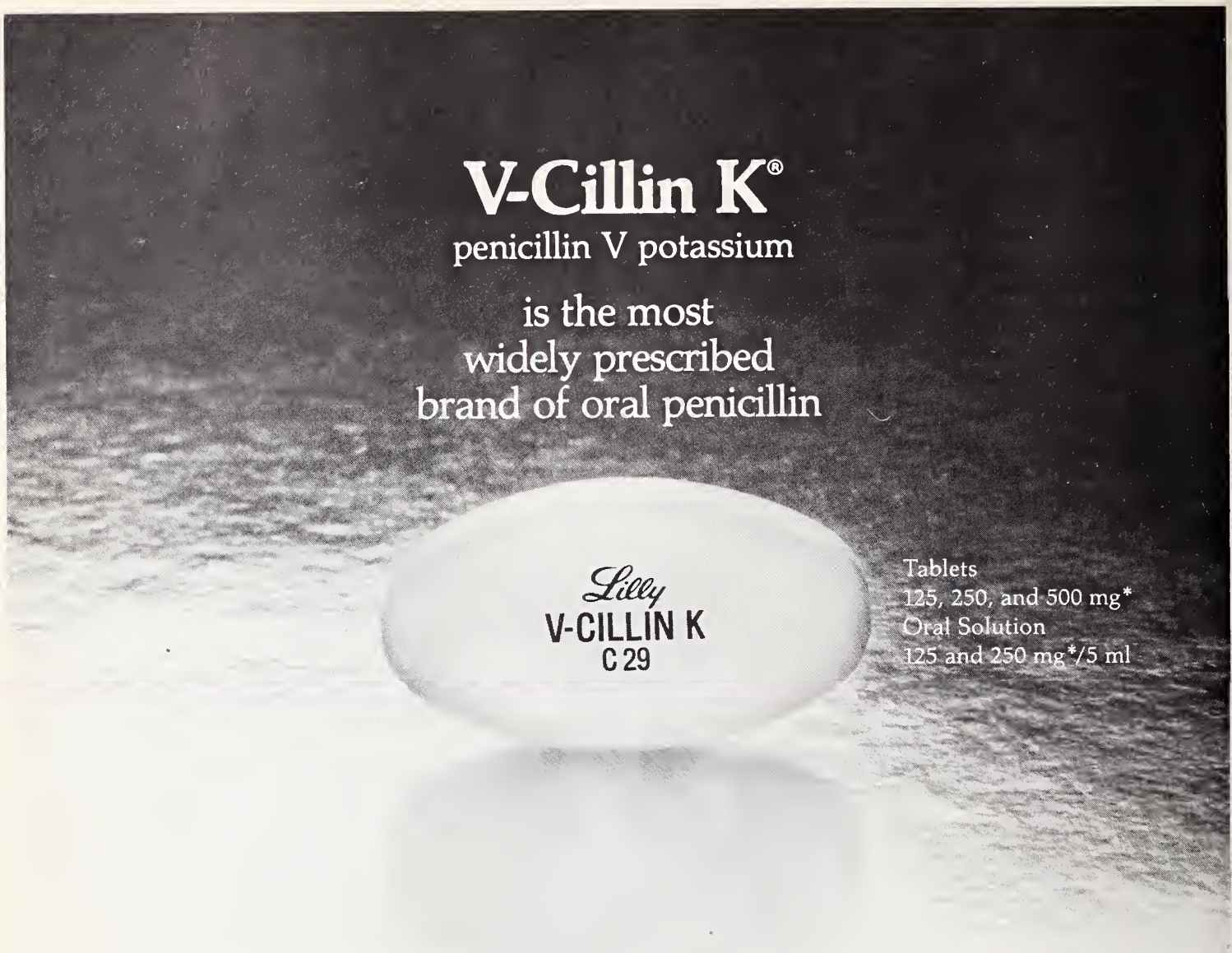
Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350



V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. [102175]

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

Argon Laser Therapy of Portwine Stains*

BARD COSMAN, M.D., New York

In many cases the congenital capillary hemangioma termed a portwine stain can be treated effectively by use of an argon laser. A study of this condition was made in 202 patients. The clinical experience with this technique and the results and complications are discussed.

The portwine stain is a congenital capillary hemangioma which does not regress spontaneously and for which truly satisfactory treatment has not been available. The use of the argon laser in this condition, however, has shown considerable promise.[1-3] This study was carried out as a clinical experiment in order to shed light on both the validity of the laser therapy and on the clinical behavior of the portwine stain.

METHOD

Two Argon lasers (Dermatologic Series 1000)[a] were employed. One was set up in an office for outpatient treatment and one was located in an operating room for inpatient treatment under general anesthesia. Patients entered the study after full discussion of potential risks and benefits. Specific consent forms were completed and special record forms maintained. Patients were photographed at all stages of treatment and an effort was made to maintain the same film batch for a given patient.

CASE MATERIAL

We studied 202 patients. Their average age was 21.3 years with the youngest three months and the oldest 66 years (table 1). Sixty-three percent were female. Ten percent gave a positive family history for portwine stains and other hemangiomas. Thirty-four percent had had prior therapy including x-ray, tattoo, cryotherapy and surgery. Most lesions were on the face (table 2). Extra-facial lesions were common in females. There was no significant lateralization. Sturge-Weber (five percent) was the most commonly associated syndrome. Glaucoma with and without Sturge-Weber was the most important eye anomaly. The Klippel-Trenaunay limb hypertrophy syndrome was present in two percent. The mean area of the lesion seen was 75 cm^2. Lip hypertrophy was the most frequent structural change in the lesion area. Lesion hypertrophy—a pyogenic granuloma-like area—was highly associated with purple lesions in dark-complexioned patients with sebaceous type skin. Sixty-eight percent of lesions blanched little if at all but the rest showed marked blanching (table 3). Blanchers were younger than non-blanchers, irrespective of previous therapy, of lesion color, or of the patient's sex.

LASER THERAPY

The argon laser produces a coherent light with wave length 4800-5200 A°. By happy chance the skin is relatively transparent to these wave lengths but hemoglobin pigment is a

*Read before the Section on Plastic and Reconstructive Surgery, 213th Annual Meeting of the Medical Society of New Jersey, May 13, 1979, Atlantic City. This study is from the Division of Plastic Surgery, Department of Surgery, Columbia-Presbyterian Medical Center, New York and was made possible by a grant from the Polly Annenberg Levee Charitable Trust and a gift from Mr. and Mrs. Michael A. Sidel. Dr. Cosman is Clinical Professor of Surgery, Columbia University, New York. He may be addressed at 161 Ft. Washington Ave., New York, N.Y. 10032.

[a]Coherent Radiation, Inc., Palo Alto, CA.

Table 1
Age Distribution

Age	0-1	11-20	21-30	31-40	41-50	51-70
Number	44	64	51	23	12	8
Percent	22	31	25	11	6	4

Table 2
Lesion Location

Site	Lid 99	Face 186	Neck 41	Trunk 2828	Upper Extremity 9	Lower Extremity 17	Oral 44
Combinations	99	40	19	24	6	4 7	44

Table 3
*Blanching**

	Number	Percent	Average Age	Percent less than age 10
Minimal Blanching	88	68	24.5	11
Marked Blanching	42	32	16.3	36

*Blanching recorded in 130 cases

Table 4
Test Spot Evaluation

	Number	Percent	Marked	Moderate
Scar	4	5	1	3
Depression	34	40	0	1
Pink	42	50	0	9
Red	14	17	3	6
Residual	36	43	6	6

very efficient absorber of light at these same wave lengths. As the hemoglobin pigment within the blood cells within the tiny vessels of the stain absorbs the light, the light energy is transformed to heat and the vessels are damaged by the heat evolved within their lumens and so thrombose. While the skin also is heated in this process the relative specificity of the locus of heat development makes it possible to use the laser at a power level that allows sparing of the secondary skin appendages and so permits the area to heal as in a superficial second-degree burn.[2-5] Ionizing radiation is not produced by the argon laser. While the instrument used can produce up to five watts power, the levels used clinically are the lowest that produce macroscopic vessel thrombosis (seen as a greyish color in the red of the lesion) and average from 0.5 to about 1.8 watts. At these power levels the beam penetrates the skin only one to 1.5 mm[2,3]. On the one hand, those lesions whose vessels extend deeply and whose color is determined by those deep vessels will be improved little by therapy. On the other hand some patients will show significant scarring even at the minimal power levels needed to produce a change in their lesions. In neither of these groups is laser therapy desirable. It is to determine whether a patient falls into these categories that a "test spot" is performed (figure 1).

TEST SPOT RESULTS

One hundred thirty-six test spots were made in 132 patients. The remainder of the patients did not have this test. After explanation of the treatment 36 patients refused; in 34 it was not offered. Some initial poor results led to extreme and possibly excessive caution in very young patients. Other reasons for avoiding a test included deeply pigmented skin (since melanin absorbs the light and masks the hemoglobin-containing vessels), insignificant lesions, and obvious emotional instability of the patient. In 82 patients 84 spots were followed for four months or more.

Test spots were evaluated as to scar, depression, pinkness, redness, and residual lesion. We assigned numerical equivalents to clinical judgments of slight, moderate, or marked involvement and the results were rated (table 4). There was a five percent incidence of scarring. In 43 percent residual lesion could be distinguished. Depression, pinkness, and redness all tended to regress. Using these criteria test spot results showed 75 percent good to excellent outcomes and 25 percent fair to poor (table 5). Previous therapy did not have a deleterious influence (table 6, figure 2). In fact, there was a higher incidence of good results in previously treated patients and a lower incidence of poor results. No one prior treatment mode was different from the others. Blanching, however, did prove to have clinical significance (table 7). In 61 patients in whom the degree of blanching had been recorded and a test spot performed, the incidence of good results was 73 percent in the non-blanching group and 53 percent in the marked blanchers. Further, there was a 23 percent incidence of poor results in the marked blanchers as compared to three percent in the non-blanchers. The proportion of poor to good results in the very young had led us to avoid testing in this group (table 8). Aside from this, good results were obtained in all age groups. An examination of lesion color versus spot result also suggested that good results could be achieved whatever the color but it did seem that the proportion of poor results increased as the color darkened (table 9).

TREATMENT RESULTS

When a patient achieved a good test spot, treatment was offered. Therapy was made available on an outpatient basis with the area to be treated at a single sitting limited to that anesthetized by 30 cc of one percent xylocaine without epinephrine (10 to 12 cm²). The average number of impulses per outpatient treatment was 3941. Using a pulse duration of

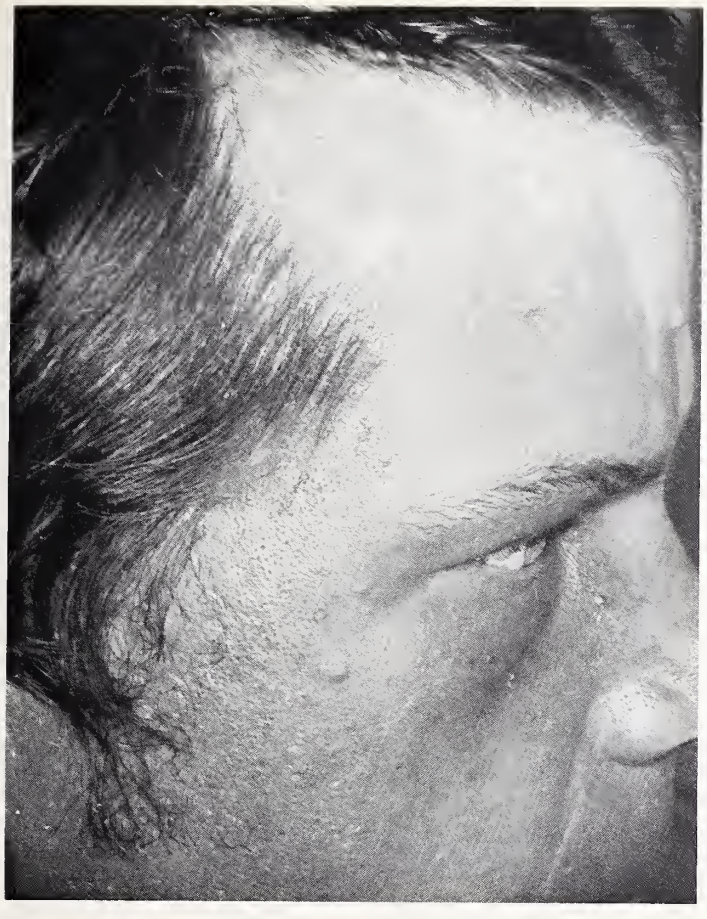


Figure 1—Good result of test spot at temporal hair line five months after treatment.

0.2 seconds and a near minimal interval this usually represented about one hour of treatment time. Successive treatments could be carried out in the succeeding days or after four to five month intervals to allow evaluation of each treatment result. Patients also had the option of treatment under general anesthesia. In patients so treated an average of 12,225 impulses was delivered in one and a half hours.

Treatment was evaluated in the same way as in the test spots (table 10). Scarring was found in three treatments in two patients, a nine percent incidence. Pinkness, redness, and depression tended to regress as with the test spots. Residual lesion was noted in 81 percent of treatments. Using these criteria 59 percent of treatments could be called good or excellent, 36 percent were fair and 6 percent were poor (table 2). Examples of these results are shown in figures 2 to 9.

It is instructive to compare the treatment results with the test spot results in the same patients. Twenty percent were graded the same, 20 percent were graded better and 60 percent were graded slightly poorer. Aside from scarring, poor results were due to residual lesion and were associated with darker, thicker lesions. Presumably the depths of such lesions were not reached by the laser beam at the energy levels employed. Since such thick lesions showed thinning after treatment it seemed possible that the deeper vessels might be available for retreatment. It also seemed that any vessels recannalized might be obliterated by a second try. There has been an increment of improvement after most retreatments but only a few determinate results are yet available. Retreatment is considered only after eight months to one year following initial therapy. No tertiary treatment yet has been done.

Table 5
Test Spot Results

Results	Number	Percent
Excellent	6	7
Good	57	68
Fair	13	15
Poor	8	10

Table 6
Previous Therapy vs Test Spot Result

Results	Excellent	%	Good	%	Fair	%	Poor	%
Treated	3	9	25	74	4	12	2	6
Untreated	3	6	32	64	9	18	6	12

Table 7
*Blanching vs Test Spot Result**

	Excellent	%	Good	%	Fair	%	Poor	%
Minimal Blanching	5	11	32	73	6	13	1	3
Marked Blanching	2	12	9	53	2	12	4	23

*61 test spot cases with blanching recorded

Table 8
Age vs Test Spot Results

	Excellent	Good	Fair	Poor
0-10	0	3	0	2
11-20	1	16	5	3
21-30	3	19	5	2
31-40	2	9	1	0
41-50	0	7	1	0
51-70	0	3	1	1

Table 9
Color vs Test Spot Result

	Excellent	Good	Fair	Poor
Pink	1	4	0	0
Pink-Red	1	11	0	2
Red	3	32	7	3
Red-Purple	0	3	1	0
Purple	1	7	5	3

Table 10
Treatment Evaluation

	Number	Percent	Marked	Moderate
Scar	3	9	2	0
Depression	2	6	0	0
Pink	19	58	0	6
Red	7	21	0	7
Residual	27	81	0	8

Table 11
Treatment Results

Results	Number	Percent
Excellent	1	3
Good	18	56
Fair	12	36
Poor	2	6



A

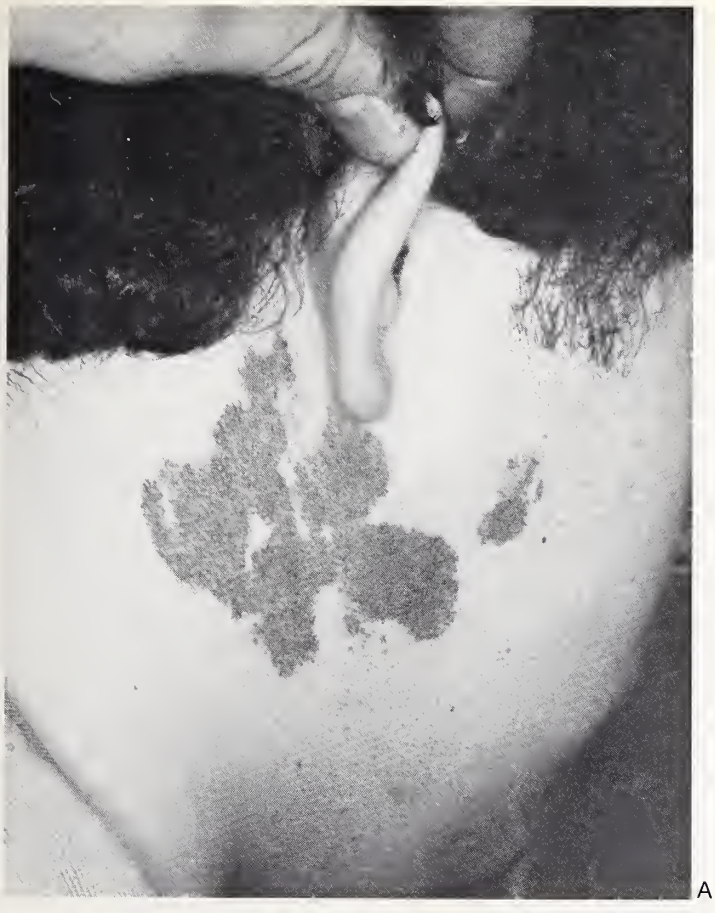


B

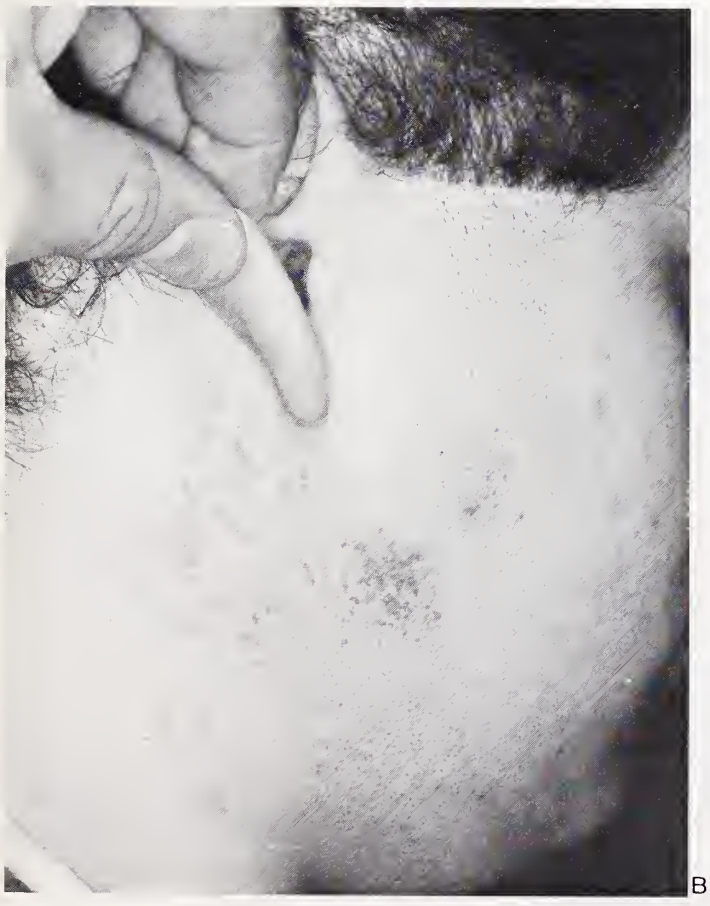


C

Figure 2—(A) Patient previously treated with tattoo and dry ice. (B) Test spot carried out at lesion edge was graded as good after five months. (C) Four months after treatment to temporal region, forehead and lateral cheek. Nasolabial fold, lip, and nose not yet treated. Result rated good.



A

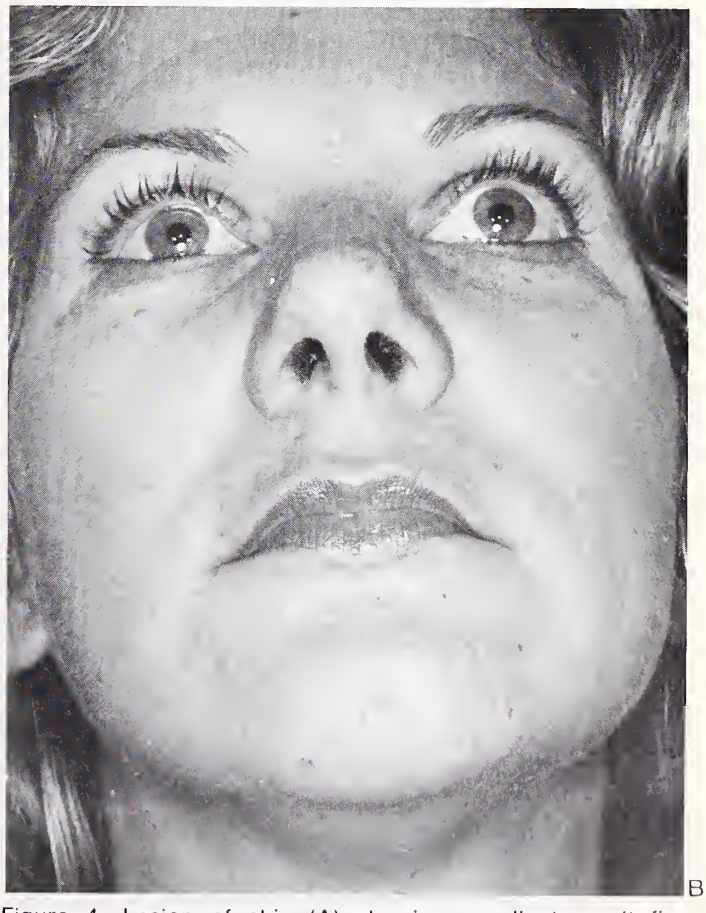


B

Figure 3—Red lesion (A) was graded as good result. (B) Nine months after single treatment under local anesthesia.



A



B

Figure 4—Lesion of chin (A) showing excellent result five months after single outpatient treatment (B).



A



B



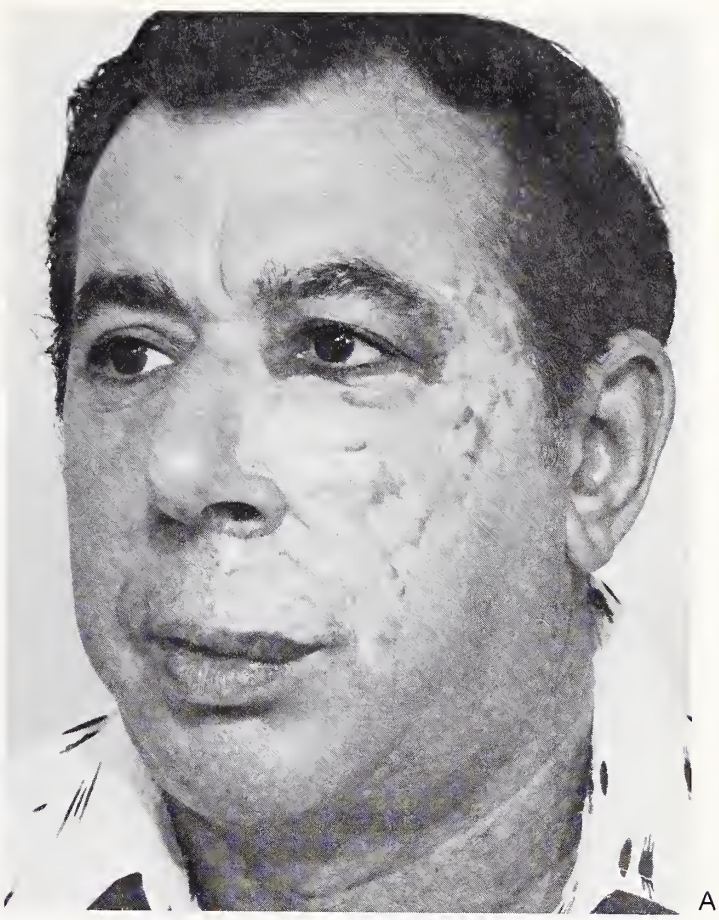
C

Figure 5—Pink lesion (A) with patchy distribution was treated in four outpatient procedures. Result at eight months (B) showed only some breaking up of the lesion outlines. Result at two years (C), however, was quite good thus demonstrating the long-term lightening that is often seen.





Figure 6—Pink-red lesion of nose and lip (A) showing result (B) five months after single treatment using 3153 laser impacts.



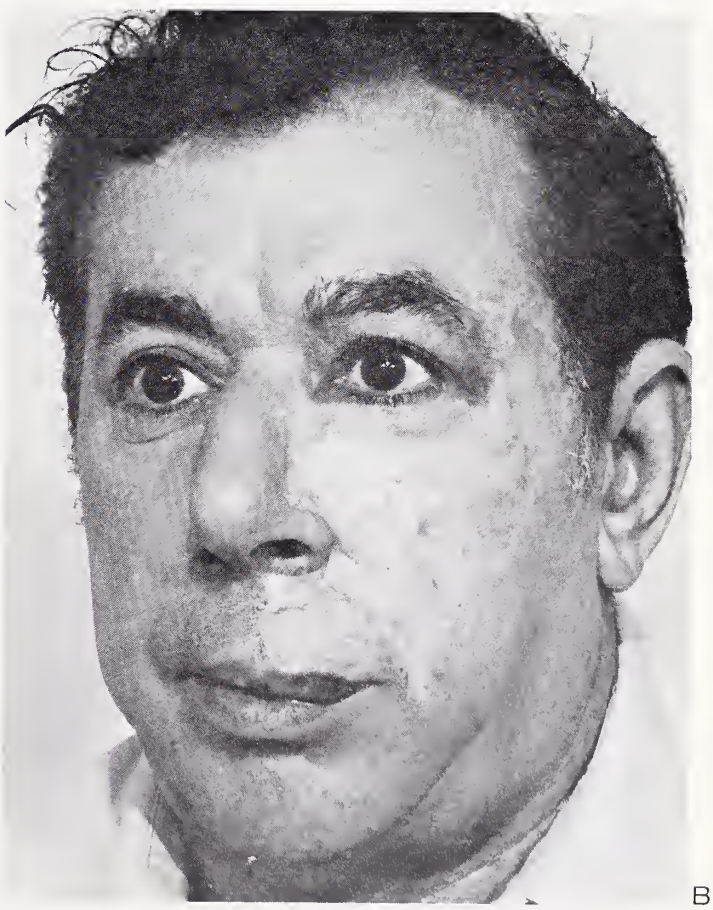
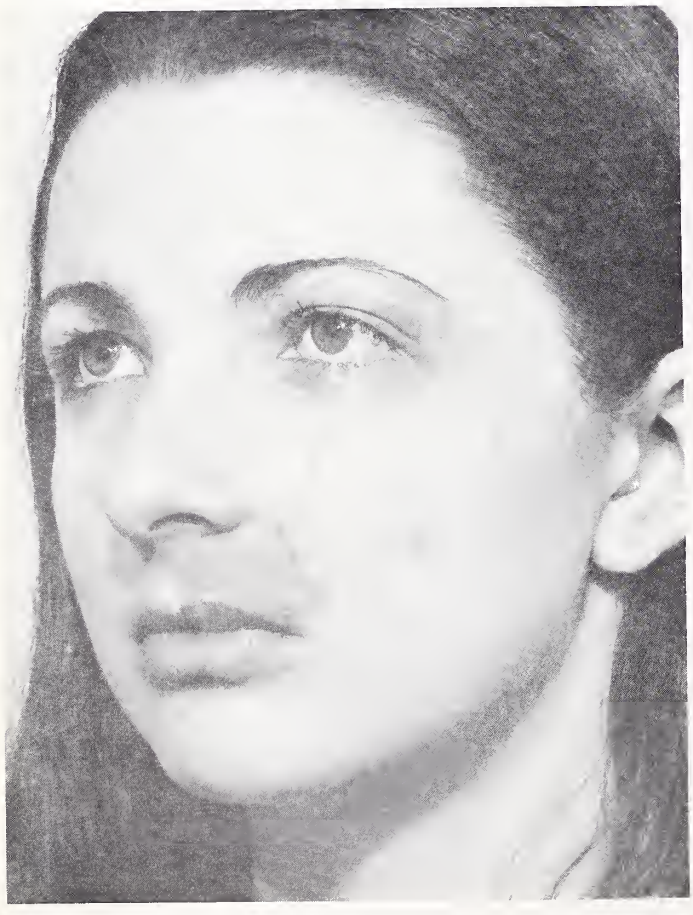


Figure 7—Seven years after skin graft excision of portwine stain (A) the result is marred by residual stain in and between the skin grafts. Five months after laser therapy to these areas (B) there is obvious improvement.



A



B

Figure 8—Red lesion (A) showing result (B) 13 months after two treatments under local anesthesia. Periorbital region and upper lip were not treated.



Figure 9—Severe scar of upper lip—the worst scarring so far produced.

SUMMARY

Two hundred two patients with portwine stains have been studied and clinical features of the condition analyzed. Of these, blanching or the lack of it seemed most closely related to the actual result of test spots with the argon laser. Results of testing could be called good or excellent in 75 percent, while the results of actual treatment were good or excellent in 59 percent. The incidence of scarring was five percent in test spots and nine percent in treatment areas. Residual lesion was the most frequent cause of poor results but retreatment offers an increment of improvement. Overall, the argon laser therapy of portwine stains appears to be a valid treatment modality.

REFERENCES

1. Goldman L, Dreffer R, Rockwell RJ and Perry E: Treatment of portwine marks by an argon laser. *J Dermatol Surg* 2:385-388, 1976.

2. Apfelberg DB, Maser MR and Lash H: Argon laser management of cutaneous vascular deformities: A preliminary report. *West J Med* 124.99-101, 1976.

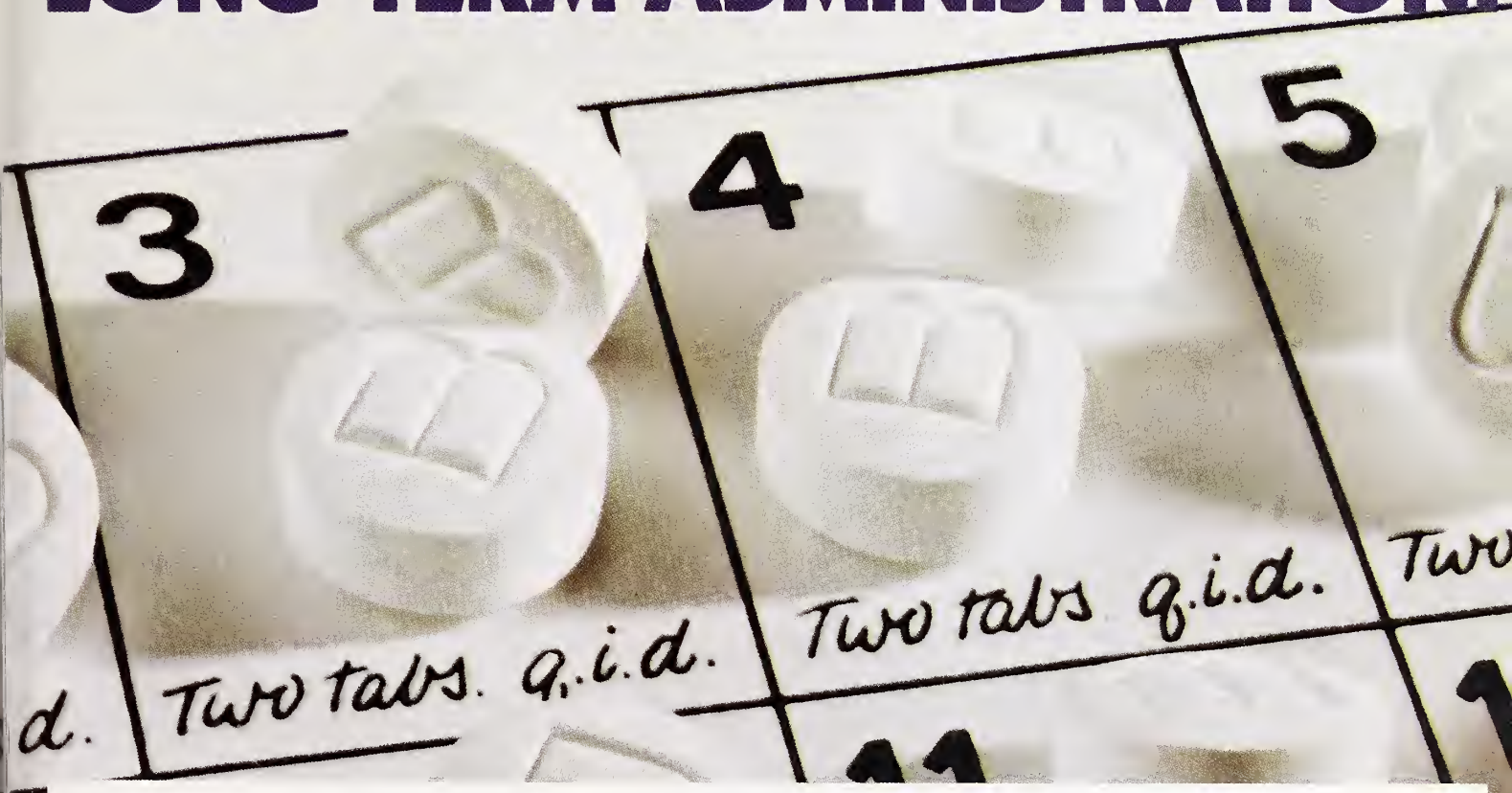
3. Apfelberg DB, Maser MR and Lash H: Argon laser treatment of cutaneous vascular abnormalities: Progress report. *Ann Plast Surg* 1:14-18, 1978.

4. Helwig EB, Jones WA, Hayes JR and Zeitler EH: Anatomical and histochemical changes in skin after laser irradiation. *Fed Proc Supp* 14.83-91, 1965.

5. Solomon H, Goldman L, Henderson B, Richfield D and Franzen M: Histopathology of the laser treatment of port-wine lesions: Biopsy studies of treated areas observed up to three years after laser impacts. *J Invest Dermat* 50:141-146, 1968.

Are you prescribing a regimen of PLAIN ASPIRIN EVERY DAY?

BUFFERIN® WAS SIGNIFICANTLY BETTER TOLERATED IN LONG-TERM ADMINISTRATION.





In a particular series of 14-day gastric tolerance studies among 182 normal subjects, 49% suffered G.I. upset from plain aspirin. Most of these subjects took BUFFERIN without discomfort.

Subjects in these controlled trials, which utilized a crossover design, were given Bufferin and Bayer® Aspirin for two weeks each in a balanced order of administration. The cumulative gastric tolerance superiority of Bufferin over plain aspirin was significant ($P = <.01$) from day one and persisting through each day of the study. This superiority for an extended period could be of particular importance to patients on repeat-dosage schedules.

For full aspirin benefits, together with excellent gastric tolerance, Bufferin should be your brand of choice. If you are prescribing a regimented daily dose of aspirin, prescribe Bufferin—the repeat-dosage aspirin—instead.

BUFFERIN: The Repeat-Dosage Aspirin.

For complimentary samples of Bufferin and Arthritis Strength Bufferin, please write: Bufferin, P.O. Box 65, Elizabeth, New Jersey 07207.
Composition: Each Bufferin tablet contains aspirin 324 mg. and the antacid Di-Alminate® (Bristol-Myers' brand of Aluminum Glycinate 48.6 mg. and Magnesium Carbonate 97.2 mg.).

©1978, Bristol-Myers Co.

No one else can give us what you can.

(Join Us. Please.)



The American Red Cross. The Good Neighbor.

A Public Service of This Magazine & The Advertising Council

Ad Council

- Bendectin continues to be the only product indicated exclusively for morning sickness — nothing else.
- Convenient bedtime dosage.
- Works in the morning when she needs it most.

Bendectin®

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION
Nausea and vomiting of pregnancy.

PRECAUTIONS
Because of potential drowsiness, Bendectin should be prescribed with caution for patients who must drive automobiles or operate machinery.
Studies in rats and rabbits have revealed no suggestion of drug-induced fetal abnormalities at doses of Bendectin up to 90 times the maximum human dose. In addition, several epidemiologic studies in women who received Bendectin during pregnancy have shown that the incidence of birth defects in their offspring is no higher than in women not taking the drug during pregnancy. Nevertheless, like all drugs considered for use during pregnancy, particularly during the first trimester, Bendectin should be used only when clearly needed.

ADVERSE REACTIONS
The adverse reactions that may occur are those of the individual ingredients. Doxylamine succinate may cause drowsiness, vertigo, nervousness, epigastric pain, headache, palpitation, diarrhea, disorientation, or irritability.
Pyridoxine hydrochloride is a vitamin that is generally recognized as having no adverse effects.

DOSAGE AND ADMINISTRATION
2 Bendectin tablets at bedtime. In severe cases or when nausea occurs during the day: 1 additional Bendectin tablet in the morning and another in midafternoon.

Product Information as of January, 1978

References:

1. Meyer, C.: American Folk Medicine. Scarborough, New York, Plum Books — New American Library, 1975, p. 208.
2. Data on file, MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215

Merrell

MERRELL-NATIONAL LABORATORIES
Division of Richardson-Merrell Inc.
Cincinnati, Ohio 45215, U.S.A.

MNQ-013

1830: A decoction of columbo root and peppermint 3 or 4 times a day should be taken for the sickness to which pregnant females are commonly subject.[1]

TODAY: Clinical studies show statistically proven efficacy for morning sickness of pregnancy with delayed-release Bendectin tablets.[2]

In morning sickness confidence begins with

Bendectin®

Each tablet contains doxylamine succinate 10 mg., pyridoxine hydrochloride 10 mg.

trusted alternative to nausea and vomiting of pregnancy

For prescribing information see opposite page.

MEDICAL INFORMATION TRANSCRIPTION SERVICE

Prompt, accurate, cost effective transcription of all types of medical data.

Call or write:
Medical Information Transcription Service
P.O. Box 890
Island Heights, New Jersey 08732
(201) 270-1033

NEED A 25% RETURN

If you are now receiving a 6%-12% return on your investment (CD's, saving certificates, Gov't. bonds, dividends, etc.) after taxes and inflation, you are losing over 3% per year on your dollars:
In today's economy you need a good hedge investment that has been doing in excess of 20% a year. We are one of the oldest investment companies of our kind in America—recommended by leading financial periodicals—and have been providing an investment that has been doing better than 25% per year for the past ten years. It has not gone down in value for 44 consecutive years. Approved for use by IRA, Keogh and Corporate retirement plans.

FOR INFORMATION CALL
(215) 667-9110
OR WRITE
A.D.C.
523 One Bala Cynwyd Plaza
Bala Cynwyd, Pa. 19004

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Foundation provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

The Foundation is supported by an in-house modern laboratory equipped to do most tests required for diagnosis and treatment. Literature on request.

1430 Second Avenue
New York, N.Y. 10021
Phone: 744-5500

NOW a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE
COMPETITIVE RATES
OPEN ENROLLMENT JUNE AND DECEMBER

For More Information Contact
Donald F. Smith and Associates
Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield

Lipoma of the Uterus: A Study and Demonstration of the Histogenesis of Two Cases*

ISTVÁN A. GÁSPÁR, M.D., Englewood

Uterine lipomas are rare tumors, none of which has been diagnosed preoperatively. The interest in these tumors is mainly their histogenesis, which still is a controversial subject. In this communication two examples of uterine lipomas demonstrate their origin from lipoblasts and embryonal fat cells.

Lipomas are common benign tumors which occur in sites where fat tissue is usually present, such as the subcutaneous fat tissue layer, the mesentery, retroperitoneum, the fatty capsule of the kidneys, mediastinum, intramuscular stroma and intestinal mucosa. On the other hand, lipomas of internal organs are rare. A lipoma orginating in the uterine wall is a distinct rarity because the uterus has no fat tissue content. Many gynecologists, surgeons and even pathologists have never seen a uterine lipoma, thus difficulties of interpretation may arise if fat cells are found in diagnostic endometrial curettage.

World-wide, up to 1977, only about 55 to 60 cases of true uterine lipomas, consisting only of fat tissue, were reported. The first description of a fatty uterine tumor can be found in Lobstein's[3] report in 1816, quoted by Meinhof and Bersch[4] in 1975.

All reports emphasized that the clinical symptoms are similar to those caused by a myoma in the same area and that some patients were completely asymptomatic. None of the tumors has been diagnosed before surgery or postmortem examination. About 70 percent of the lipomas were found in postmenopausal women, between 50 and 70 years of age. The youngest patient was 23 and the oldest one 83 years of age. The tumors varied in size from a few millimeters to a large one which measured 24 cm in diameter, reported by Henriksen[2]. Uterine lipomas most frequently occurred in the posterior or anterior walls of the corpus; only one was in the subserosa and one in the cervix. Those few which were partly submucosal were primarily myometrial and bulged into the uterine cavity in a broad polypoid fashion. The gross appearance of uterine lipomas is a uniform or lobulated, soft, lemon to orange-yellow tumor, which appears well demarcated from the adjacent myometrium.

There still is controversy concerning the possible genesis of lipoma of the uterus. Hypotheses such as fatty metaplasia of smooth muscle cells, omental fat tissue inclusion, ingrowing fat, lipogenic connective tissue cells and, particularly, displaced embryonic lipoblasts were considered to explain the origin. However, none of the authors was able to demonstrate lipoblasts and embryonal fat cells in the reported cases.

At Englewood Hospital there were 3,194 hysterectomies performed between 1969 and 1977 and only two uterine lipomas were found.

A histologic study of the following two new cases of pure uterine lipoma may shed some light on the histogenesis of these tumors.

CASE REPORTS

Case 1—A 71-year-old female was examined by her gynecologist for postmenopausal bleeding. He found a large pelvic mass the size of three months pregnancy, which he believed was probably a submucous fibroid. Dilatation and

*From the Department of Pathology, Englewood Hospital, Englewood, New Jersey. Correspondence may be addressed to Dr. Gáspár at 261 Glenwood Road, Englewood 07631.



Figure 1—Gross photo of the hemisectioned uterus with the 11 cm diameter lipoma bulging into uterine cavity (Case 1).



Figure 2—Microscopic appearance of uterine lipoma in Case 1. H&E stain, low magnification. Lipoblasts and embryonal fat cells cannot be identified with this magnification.

curettage were performed on February 12, 1977. The endometrial tissue was benign with fragments of myometrium. Lower abdominal ecchymoses were found.

Her platelet count ranged from 25,000 to 41,000 per cmm. A hematologic diagnosis of idiopathic thrombocytopenic purpura was made. On April 6, 1977 a splenectomy was performed and a hysterectomy was planned for a later date. The platelet count increased only for a short time following splenectomy. Two days after splenectomy generalized peritonitis associated with other complications developed. Despite surgical exploration of the abdomen, hemodialysis and supportive treatment, she expired on May 17, 1977 with septicemia due to serratia marcescens. Autopsy was performed. Only the gross and microscopic pathology of the uterus will be considered here.

Pathology—Gross: The uterus was enlarged, globoid, and weighed 700 grams. Only the right tube was attached. On section, there was a ball-shaped soft, pale yellow and whitish-yellow fatty tumor in the posterior wall of the uterus. The tumor which measured 11 cm in diameter was located mainly intramurally, although bulging somewhat into the uterine cavity (Figure 1). The endometrium was benign, atrophic and contained some hemorrhages. Separate from the fatty tumor there was a small, 1.5 cm diameter, intramural fibromyoma.

Microscopic: Low magnification view of the tumor showed the usual picture of lipoma (Figure 2). The stromal framework was lace-like fibrous tissue with varying-sized empty spaces. There was no capsule. Fat stain showed

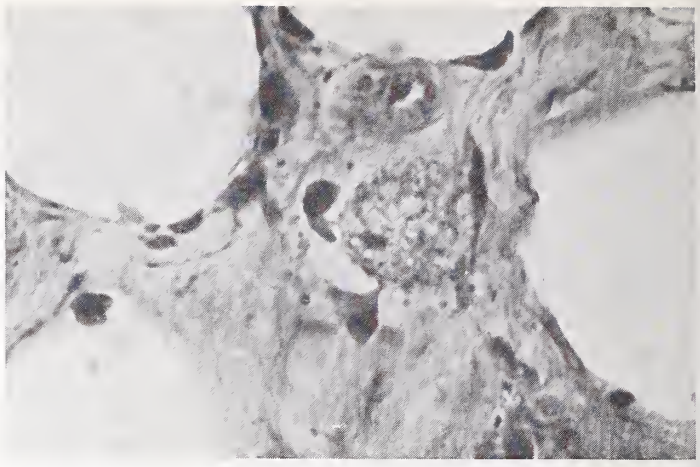


Figure 3—One embryonal fat cell "mulberry cell" and several lipoblasts within tumor stroma. Also note the large fat spaces. High magnification. (Case 1).

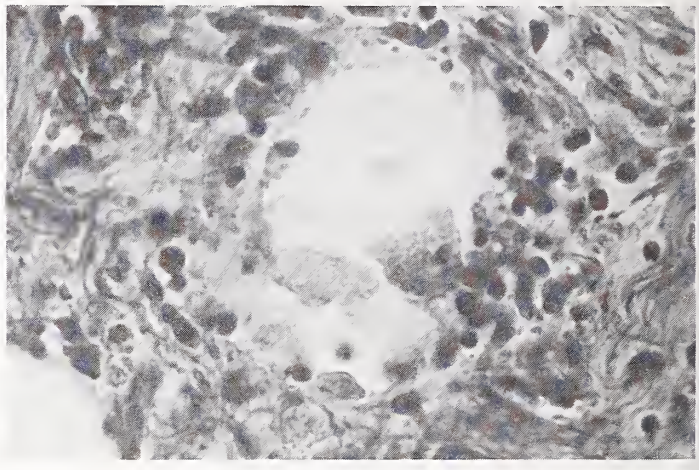


Figure 4—Masses of lipoblasts and embryonal fat cells around empty fat spaces. High magnification. (Case 1).

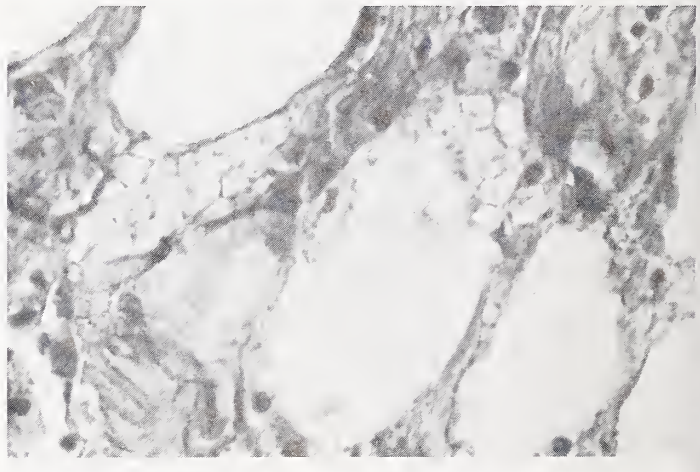


Figure 5—Embryonal fat cells with varying-sized fat vacuoles. There is some fusion of the vacuoles to form large fat globules. High magnification. (Case 1).

abundant small and large fat globules. Under high magnification a more revealing picture was seen in many places. Namely, lipoblasts and embryonal fat cells could be recognized. The lipoblasts were identified as small round, oval, spindle or triangular-shaped cells with pink cytoplasm in Masson's-stained sections. They were found in small groups, or as single cells in the connective tissue stroma of the tumor. The embryonal fat cells, called "mulberry cells" by N. Ch. Foot,[1] were discovered in many areas (Figures 3,4,5). These cells possessed small round, or oval-shaped nuclei, frequently in central location. The cytoplasm was vacuolated. Some of the vacuoles were small, others were large or fairly large and



Figure 6—The hemisectioned uterine corpus with the 10 cm. diameter intramural uterine lipoma. A few fibromyomas can also be seen. Gross photo (Case 2).

fusions of the vacuoles have occurred and produced large fat spaces (Figure 5). There was no suggestion of fatty degeneration of muscle or connective tissue cells into fat cells. At the periphery of the tumor, in some spots, there were embryonal fat cells extending superficially into the adjacent myometrium and apparently splitting away myometrial tissues for eventual inclusion into the lipoma mass. No malignant changes were found.

Case 2—A 64-year-old female was hospitalized August 6, 1978 with the chief complaint of an enlarging abdominal mass. She was first seen in 1975 for evaluation of a pelvic mass. Physical examination under anesthesia and curettage suggested degenerating myomas, but ovarian tumor could not be ruled out. She was seen again on July 4, 1978 because of abdominal cramps radiating to the legs and urinary frequency without incontinence. Two days later the abdominal cramps returned. The abdomen was flat and nontender. Atrophic vaginitis and a tan-colored discharge without bleeding were noted. The uterine fundus was described as a semicystic mass of 10 to 12 cm size, which was larger than at examination in 1975. Laboratory studies were unremarkable. The clinical impression was enlarging myomas due to cystic degeneration with ovarian tumor to be ruled out. Total abdominal hysterectomy was done on August 8, 1978.

Pathology—Gross: The uterine body measured 12x9x12 cm. and weighed 695 grams without the adnexa. In the posterior wall of the uterus there was a large, fluctuating mass, which felt cystic. On section, it was a soft, orange-yellow tumor, 10 cm diameter without cystic degeneration (Figure 6). The tumor was mostly homogeneous. In some areas it was congested and mottled. It was surrounded with myometrium and it did not bulge into the uterine cavity, which was not distended or distorted. The myometrium was atrophic. Several leiomyomas measuring 1.5 to 4 cm size were found in addition to the lipoma. The right ovary showed a small one cm diameter thecoma. Otherwise the adnexa were atrophic.

Microscopic: The tumor showed the usual histologic picture of a benign lipoma with scattered small islands of connective tissue including some smooth muscle cells. There



Figure 7—Lipoblasts surround a large fat space in center of photograph. Medium magnification. (Case 2).

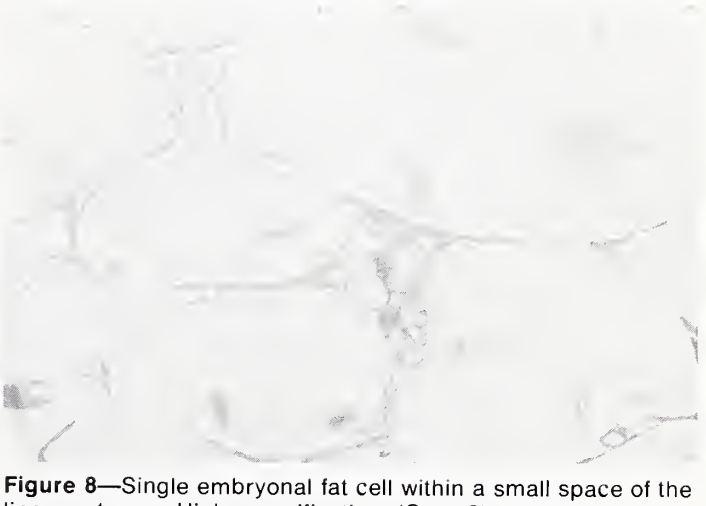


Figure 8—Single embryonal fat cell within a small space of the lipoma stroma. High magnification. (Case 2).

was no capsule. Abundant fat globules were seen with fat stain. Here and there, within the tumor, there were some lipoblasts (Figure 7) and some embryonal fat cells (Figure 8). These early fat cells, one to several in one area, were located frequently within the fat spaces of the tumor. The dark pink mottled areas, seen grossly on section surface of the tumor, were caused by small hemorrhages into the lipoma from capillaries, which were numerous throughout the tumor. A minimal, very superficial extension of the tumor into the myometrium, including embryonal fat cells, was demonstrable.

DISCUSSION

Two case reports of large pure lipomas of the uterus, in which the clinical symptoms and physical findings were indistinguishable from uterine fibromyomas, are described. In both cases as with all previously reported cases of uterine lipomas, the diagnosis was not made preoperatively.

The histologic picture was that of the usual benign lipomas with the important difference that early fat cells, namely lipoblasts and embryonal fat cells, were demonstrated in varying numbers. The gradual maturation of the embryonal fat cells into mature fat cells was demonstrable. Masson's trichrome stain gave the best results to demonstrate the lipoblasts and embryonal fat cells. In the uterine lipoma of the first case the embryonal fat cells were numerous in some places, but a large portion of the tumor appeared mature, representing the end-stage of development of the fat cells. The uterine lipoma of the second case included scattered embryonal fat cells and some lipoblasts among the bulk of

mature fat cells. The maturation was more advanced in this second tumor than in the lipoma of the first case. There was no encapsulation of either tumor. However, a minimal extension into the bordering myometrium was demonstrable.

The gradual maturation of an embryonal lipoma into a mature lipoma of the right axilla, over a period of 20 months followup, in a child of five months of age, was reported by DP VanMeurs.[6] Although VanMeur's tumor was not heteroplastic, it proves the origin of a common lipoma from an immature type of benign lipoma. Thus, a very similar, but not complete maturation process of the lipoma of the uterus occurred in both of our cases. There was no suggestion that the tumors were the result of metaplasia or fatty degeneration of the few incorporated smooth muscle or connective tissue cells. Many authors, such as Seydel, Meinhof and Bersch, favor displaced, lipoblastic embryologic rests of fatty tissue for the origin of uterine lipomas.[4,5] If such embryologic rests were responsible for the development of uterine lipomas, we should find such tumors in a much younger age group than the 50 to 70 years of age range reported in the great majority of the published cases.

Vellios states that "fat is a specialized substance derived from lipoblasts which, in turn, arise from perivascular mesenchyme."[7] He also states that lipoblasts continue to be formed in postnatal life, can develop in postnatal life, can develop in later life and do not have to be at a certain place during embryonic life. This is the most plausible explanation for the histogenesis of uterine lipomas. The myometrium has abundant vascularity with perivascular mesenchyme from which lipoblasts, embryonal fat cells, and subsequently, primary uterine lipomas may develop rarely.

SUMMARY

Two case reports of the rare primary lipoma of the uterus were presented. The clinical symptoms and physical findings were similar to those found in fibromyomas. In addition to the typical histologic picture of a lipoma, lipoblasts and embryonal fat cells were found in varying numbers and a transformation into mature fat cells also was observed. The fat cells of the two lipomas did not develop from degenerating muscle or connective tissue cells, but from lipoblasts and embryonal fat cells. These early fat cells developed in later life from cells of perivascular mesenchyme. Such consideration is in agreement with the opinion of Vellios, who stated that lipoblasts continue to be formed in postnatal life and can develop in later life from perivascular mesenchyme.

REFERENCES

1. Foot N Ch: *Pathology in Surgery*. Philadelphia, Lippincott, 1945. P 102.
2. Henriksen E: Lipoma of the uterus. *Western J Surg* 60:609-612, 1952
3. Lobstein S: See Meckel JF: *Handbuch der Pathologischen Anatomie*. CH Reclam 2:311, Leipzig, 1816. Quoted by Meinhof U and Bersch W
4. Meinhof U, Bersch W: Beitrag zur Kenntnis der fettgewebshaltigen Uterustumoren. *Zentralbl allg Path* 119:359-363, 1975
5. Seydel O: Lipoma fibro-myomatosum uteri (with additions by Meyer R). *Zeitschrift für Geburtshilfe und Gynäkologie* 50:274-292, 1903
6. Van Meurs D P: The transformation of an embryonic lipoma to a common lipoma. *Brit J Surg* 34:282-284, 1947
7. Vellios F *et al:* Lipoblastomatosis. Tumor of fetal fat different from hibernoma. *Am J Path* 34:1149-1159, 1958



Tagamet®

brand of

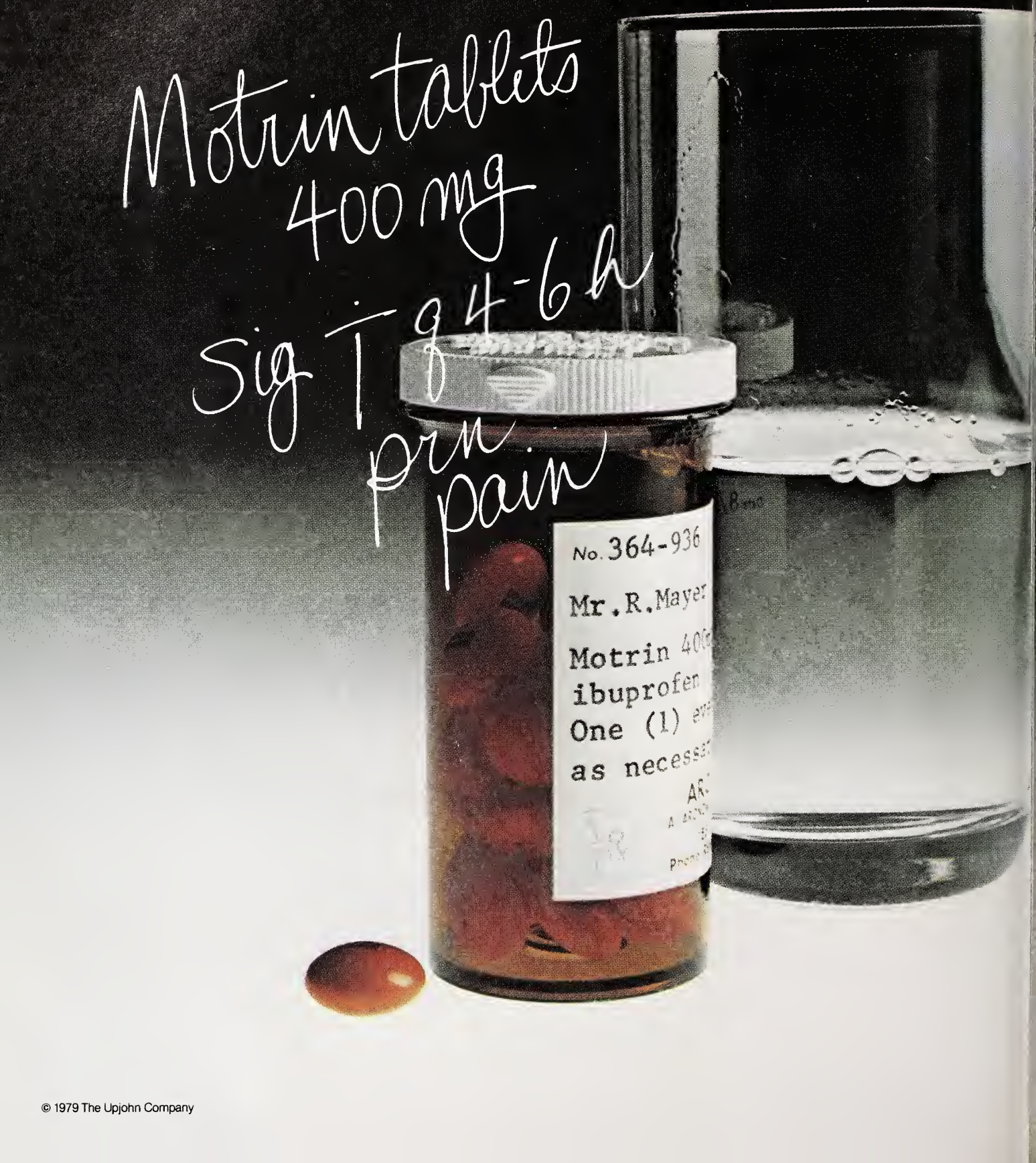
cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

A well-tolerated, nonnarcotic prescription for pain



© 1979 The Upjohn Company

Motrin® now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

Time after drug administration (hour)		.5	1	2	3	4
Mean relief-of-pain scores* (No. patients reporting)	Motrin 400 mg ibuprofen	.89 (108)	1.25 (108)	1.36 (108)	1.28 (107)	1.19 (106)
	Darvon 65 mg propoxyphene	.66 (100)	.99 (99)	1.13 (96)	.99 (96)	.80 (96)
Statistical significance		$p<0.02$	$p<0.01$	$p<0.05$	$p<0.02$	$p<0.002$

*0 = No relief 1 = Partial relief 2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

Motrin 400 mg TABLETS
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin:* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.
Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7444-4

November, 1979

Healthy hearts do it better

A healthy heart can help you enjoy your life to its fullest, and longest. People with healthy hearts can look better, feel better and do more than those with heart disease.

Help your heart give you a healthy life. Don't start smoking, or, if you already do, give it up. Eat a well-balanced diet and watch your intake of fatty, fried and high-cholesterol foods. Exercise regularly, and have your blood pressure checked. If it's high, follow your doctor's orders for treatment.

We want you to get the most out of life, and do it with a healthy heart.

Please give generously to the American Heart Association

WE'RE FIGHTING FOR YOUR LIFE

STATE OF THE ART

Laser Therapy of Glaucoma*

IVAN H. JACOBS, M.D., and
ALFONSE A. CINOTTI, M.D., Newark

This paper outlines the physical characteristics of the laser and its use in different types of glaucoma: angle closure, neovascular and open angle glaucoma.

The therapy for glaucoma is dependent upon the anatomic classification of the angle of the anterior chamber. A determination of whether an angle is open or closed or whether associated ocular pathology, e.g., the secondary glaucomas, is present is necessary. Since the discovery of miotic drugs 103 years ago,[1] topical medication has been the standard treatment of open angle glaucoma with surgical intervention considered only in uncontrolled cases.[2] In contrast, the classical treatment of angle closure glaucoma has been surgical, ever since von Jaeger introduced the iridectomy in 1857.[3] The secondary glaucomas also depend upon the underlying anatomical considerations of the angle for treatment. In these cases, there is usually some defect of the angle, either closure due to adhesions or blockage from extraneous matter such as blood cells or inflammatory cells. Neovascular glaucoma, caused by diabetic retinopathy or occlusion of the central retinal vein, is a type of secondary closed angle glaucoma which is usually most severe and refractory to any treatment. Until recent advancements, it was almost synonymous with progressive, painful, total blindness.

The purpose of this paper is to describe some of the present uses of laser therapy and present research into future applications. The laser beam has added a new modality in the treatment of these glaucomas.

The laser is monochromatic light energy. By means of a slitlamp delivery system, a finely focused beam of light can be applied to various parts of the eye in easily controllable sizes, duration and energy levels. Absorption of the energy is dependent upon the amount of pigmentation of the tissue, with resultant heat production and destruction of tissue. It is this ability to produce localized burns in various parts of the eye which gives the surgeon another treatment modality in addition to standard surgical procedures.

ANGLE CLOSURE GLAUCOMA

The laser beam has had its greatest success in the treatment of angle closure glaucoma.[4] According to presently accepted theory,[5] this condition is due to a relative impedance of fluid passage from the posterior chamber to the anterior chamber. This causes the peripheral iris tissue to bulge against the trabecular meshwork. The angle closes, aqueous cannot drain from the eye, and the intraocular pressure rises. The laser provides a new and noninvasive method to produce an iridectomy to reestablish the communication between the posterior and anterior chambers. The iris then can recede from the angle allowing the aqueous to drain. Our success rate of laser-produced iris perforations (Figure 1) is 95

*From the Lions Glaucoma Service, Eye Institute of New Jersey and the Department of Ophthalmology, CMDNJ-New Jersey Medical School, Newark, New Jersey. Dr. Jacobs is Clinical Assistant Professor, and Dr. Cinotti is Professor and Acting Chairman, Department of Ophthalmology, New Jersey Medical School, CMDNJ, Newark. Correspondence may be addressed to Ivan H. Jacobs, M.D., 345 Somerset St., North Plainfield, NJ 07060.



Figure 1—An iridectomy (arrow) is seen via retroillumination.

percent (21 of 22 attempts), which compares favorably with other series.[6] The benefits of this treatment, when successful, are obvious: hospitalization is not required and operative complications are reduced because intraocular manipulations are not performed. Should a laser iridectomy fail, a surgical iridectomy can be performed afterwards, usually without problems. Long-term followup studies of these patients are necessary before one can recommend that it be the procedure of choice in angle closure glaucoma.

NEOVASCULAR GLAUCOMA

Ocular ischemia from any cause, e.g., diabetic retinopathy, central retinal vein occlusion, central retinal artery occlusion, carotid stenosis, and others, is the underlying pathophysiology of this type of glaucoma. Presently, an unidentified vasoproliferative factor[7] is postulated to be released from the hypoxic retinal areas with the development of proliferative retinopathy and the appearance of a fibrovascular tissue on the surface of the iris (rubeosis iridis) and trabecular meshwork. Eventually, the angle becomes closed by the tissue with the occurrence of an extremely severe glaucoma. Treatment consists of photocoagulation of the retina by approximately 1,500-3,000 laser burns, preferably before the angle is involved. The rationale of treatment is the conversion of the hypoxic tissue to anoxic tissue by its destruction in order to remove the vasoproliferative factor and cause the regression of newly-formed vessels. Thereafter, involution of the proliferative retinopathy and rubeosis iridis may occur with better control of the glaucoma.[7,8] In addition to the retinal photocoagulation, regression of the angle vessels by direct laser therapy (goniophotocoagulation)[9] may be helpful. For these treatments to be effective, however, they must be performed before extensive damage to the trabecular meshwork has occurred.

OPEN ANGLE GLAUCOMA

Laser treatment of open angle glaucoma is still in the clinical investigational stages but appears to have some potential. One treatment protocol calls for 100 multiple direct laser applications to the trabecular meshwork for 360° circumferentially in order to tighten the trabecular meshwork and open the collapsed canal of Schlemm. From what already appears in the literature[10-12] some patients treated in this manner have been able to avoid filtration surgery, without any evidence of serious complications. Before such treatment acquires any popularity for open angle glaucoma, such factors as the number, placement, and energy requirements of the laser burns remain to be determined, as well as the long-term followup on ocular pressure control.

"The laser provides a new and non-invasive method to produce an iridectomy to reestablish the communication between the posterior and anterior chambers."

"Laser iridectomy eventually may become the procedure of choice in angle closure glaucoma with the development of new instruments which will guarantee a hole in the iris."

SUMMARY

Laser therapy of various forms of glaucoma has been shown to be beneficial in the surgical treatment of some cases of glaucoma. Laser iridectomy eventually may become the procedure of choice in angle closure glaucoma with the development of new instruments which will guarantee a hole in the iris. Laser retinal photocoagulation combined with goniophotocoagulation in certain instances now offers some success in the treatment of early neovascular glaucoma. The laser treatment of open angle glaucoma shows some promise but awaits long-term followup.

REFERENCES

1. Laqueur L: Neue Therapeutische Indikation fur Physostgmine. *Centralbl Med Wissensch* 14:421, 1876.
2. Cinotti AA and Jacobs IH: Surgical treatment of glaucoma. *J Med Soc NJ* 76:122-24, 1979.
3. Von Graefe A: Ueber die Wirkung der Iridectomie bei Glaucom. *Arch Ophthalmol* 3:456, 1857.
4. Abraham RK and Miller GL: Outpatient argon laser iridectomy for angle closure glaucoma: A two-year study. *Trans Amer Acad Ophthalmol Otolaryng* 79:529-38, 1975.
5. Mapstone R: Mechanics of pupil block. *Brit J Ophthalmol* 52:19-25, 1968.
6. Abraham RK and Pollack I: In papers given at the International Medical Laser Symposium. Detroit, Michigan, March 1979.
7. Little HL, Rosenthal AR, Dellaporta A, Jacobson DR: The effect of pan-retinal photocoagulation on rubeosis iridis. *Am J Ophthalmol* 81:804-09, 1976.
8. Wand M, Dueker DK, Aiello LM, and Grant WM: Effects of panretinal photocoagulation on rubeosis iridis, angle neovascularization and neovascular glaucoma. *Am J Ophthalmol* 86:332-39, 1978.
9. Simmons RJ, Keuker DK, Kimbrough RL and Aiello LM: Goniophotocoagulation for neovascular glaucoma. *Trans Amer Acad Ophthalmol Otolaryngol* 83:80, 1977.
10. Krasnov MM: Laser puncture of anterior chamber angle in glaucoma. *Am J Ophthalmol* 75:674-78, 1973.
11. Wickham MD and Worthen DM: Argon laser trabeculectomy: Long-term followup. *Ophthalmol* 86:495-503, 1979.
12. Wise JB and Witter SL: Argon laser therapy for open angle glaucoma: A pilot study. *Arch Ophthalmol* 97:319-22, 1979.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Treatment of Extensive Infection from Artificial "Hair" Implantation

RICHARD B. BLOOMENSTEIN, M.D., Englewood*

All physicians should be aware of the potential danger of severe infection which may follow scalp implantations of artificial material to simulate normal hair. Treatment of a patient with such infection is detailed. Clinical photographs, photomicrographs, and drawings are presented to illustrate the course and results of treatment. A discussion of medically proved autogenous hair transplant methods also is included.

At the time of this writing, the Federal Food and Drug Administration is still collecting instances of complications associated with artificial hair-like implantation. The Federal agency still has not determined whether or not to restrict use of this *medical device.*

Non-medical commercial practitioners have inserted synthetic strands into the scalps of thousands of patients. Some implants are used in clumps to simulate hair; some are woven into the scalp to hold pieces of actual human hair, either autogenous or homogenous.

Infection is the frequent complication following the implantation of synthetic material into the scalp. This should be no surprise to physicians, who have known for years that partially exposed foreign material placed into a body surface will usually become contaminated and infected by bacteria. Such an implantation is doomed to failure. It is important that physicians be cognizant of the widespread use of synthetic "hair" implants so that complications can be treated adequately.

CASE REPORT

A 27-year-old white male with strong family background of male-pattern baldness developed alopecia particularly in the frontal and mid-scalp adjacent to the vertex of the scalp. He attended a clinic run by a non-medical entrepreneur who has reportedly since left the country. During three sessions, each about three hours long, an unknown but high number of implants, (he was told "over 2000") artificial hair-like synthetic strands were imbedded in the bald areas of frontal and vertex scalp. They were implanted mixed with the thinned but normal hair in the occipital area. Despite shampoos, ointments and antibiotics prescribed by the clinic, a massive foul-smelling matted infection developed and spread throughout the scalp.

At four months after completion of the implantations, the patient was seen for plastic surgery consultation and admitted to the hospital for further treatment. By this time the patient had extensive edema of the scalp with drainage of thick exudate, from which staphylococcus aureus, coagulase positive, was cultured (Figure 1). The treatment consisted of clipping of the hair to allow access to the base, surgical soap shampooing, cleaning with hydrogen peroxide and application of collaganese enzyme and Neosporin® powder topically. Intramuscular penicillin also was given. Five days after admission, when the drainage had lessened and edema had subsided, the patient was taken to the operating room. Under general anesthesia, the anterior scalp was outlined with a scalpel and the infected granulations were shaved down to the galea aponeurotica (Figure 2). Many implants were removed with the shaving and many additional loosened implants were plucked from the wound bed. It was virtually impossible to remove deeper implants which were

*Dr. Bloomenstein is Chief of Plastic Surgery, Englewood Hospital, Englewood, NJ. He may be addressed at 177 North Dean Street, Englewood, NJ 07631.

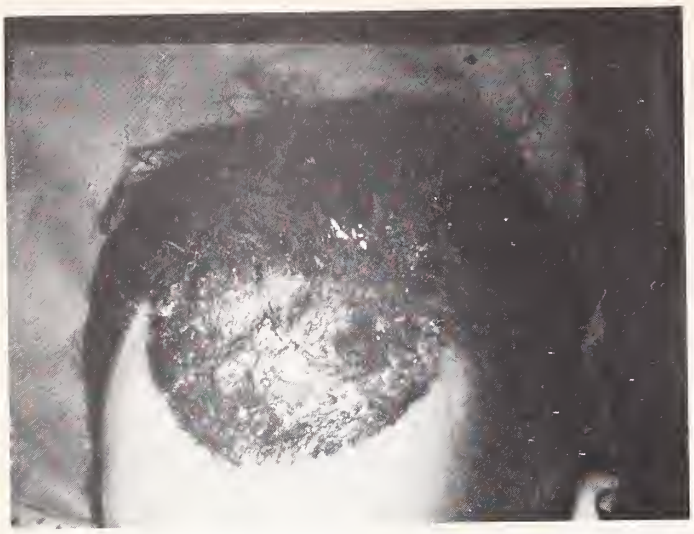


Figure 1—Patient with thousands of infected synthetic hair-like strands imbedded in the scalp.

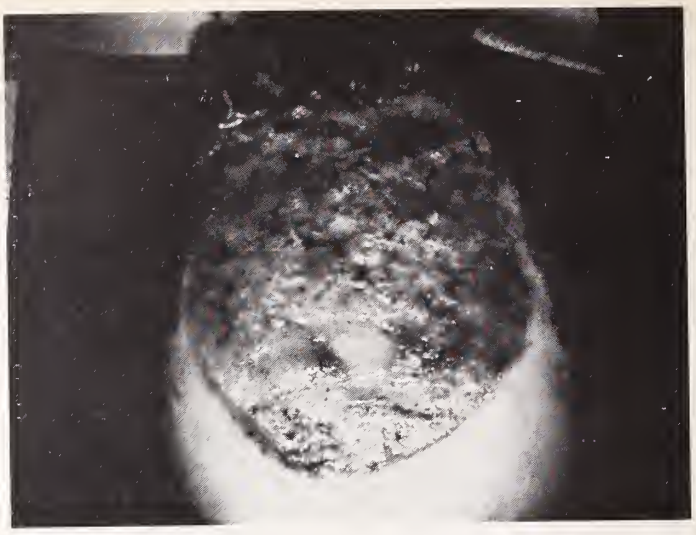


Figure 2—Operative view of patient immediately after surgical shaving of scalp and infected implants.



Figure 3—Pathologic slide of specimen—cross section of epithelial cyst wall (A). Double fiber implants with amorphous debris and inflammatory material (B). Double strand implant (C).

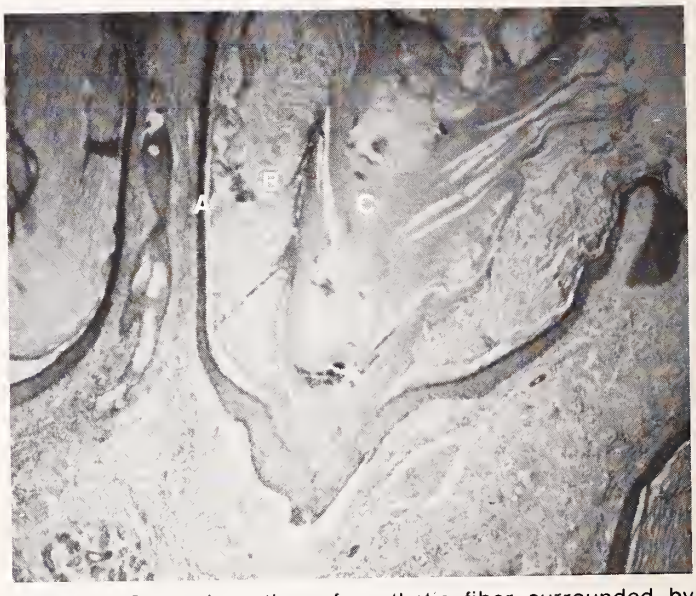


Figure 4—Coronal section of synthetic fiber surrounded by epithelial cyst, showing cyst wall (A) and synthetic implant with amorphous debris (B). Double strand implant (C).

obviously placed through the galea. The wounds were dressed. A skin graft was **not** placed on the wound.

Postoperatively dressings were changed several times a day and continued after the second day by the patient at home. Multiple postoperative office visits have been and will be necessary to remove remaining loosened or deeply imbedded implants as the scalp epithelializes.

Pathologic slides of the specimen demonstrate well-defined epithelial encystment of the double-fiber implants with amorphous debris and inflammatory material around the implant fibers (Figures 3 and 4).

DISCUSSION

The use of artificial implants in the scalp should *not* be confused with transplants of a patient's own hair. Male-pattern baldness has been covered by wigs for centuries. In recent times the use of autogenous plugs and strips of hair and scalp from more normal areas to the areas of alopecia has proved successful in many patients. Orentreich,[1,2] Vallis[3,4] and others have published extensively on the basic autogenous hair transplant techniques. Recent refinements in surgical technique allow transfer of square plugs and strips (Figure 5). The use of square plugs allows for use of four times the number of hair follicles supplied from the same donor site area (Figure 6). This newer technique requires more surgical expertise and is not suitable for performance by non-medical technicians.[5,6]

Any *autogenous* hair-transfer technique is time-consuming, multistaged, and requires time for growth of the new hair. Indeed the transplanted hair undergoes a cycle of loss, replacement and later growth. Such techniques are generally safe in the hands of competent physicians.

By contrast, any technique that implants *foreign material* in the scalp must be regarded with a high degree of suspicion. Its attraction to the patient (client) is the immediate hairlike restoration that cannot be removed (as a wig). In some methods, synthetic sutures are implanted in the scalp in circles or spirals with "hair" woven through them. This may involve use of portions of hair removed from the patient's own occipital area. If infection develops, the sutured circle or spiral must be removed and the individual sinus tracts unroofed.

In the method employed in the patient described in this report, an operator implants a synthetic hairlike filament in the scalp, using a curved needle for a carrier, then ties the filament into the deep tissues with another suture. The depth



Figure 5—Diagram of contrast of square *vs.* round autogenous hair "plugs."

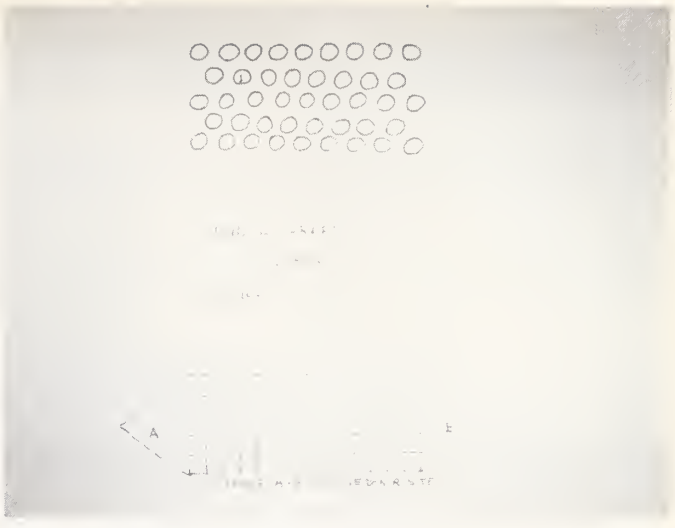


Figure 6—Diagram to contrast larger harvest of square autogenous hair transplant "plugs" *vs.* round.

to which the filament is implanted is variable—it may be down to or often through the galea aponeurotica to the pericranium. The number of such implanted filaments is quite high requiring several sessions for implantation. With the development of scalp infection a large sloughing pattern occurs with heavy surface crusting and desquamation. Beneath the crusts and necrotic epithelium and dermis, infection can spread into the areola space with the risk of intracranial infection and/or septicemia (Figure 7).

The treatment of scalp infection after implanted synthetic fibers must be directed to preventing the deep extent of spread. Topical hygiene and systemic antibiotics alone may not be sufficient because of matted implants and adherent eschars. Surgical debridement with removal of as many implants as possible then will be necessary. It is unfortunate that because of the irregular depth of these implants total removal of all of them is impossible unless one exposes pericranium and skull. If the latter occurs, pedicle flap coverage will be necessary to insure healing. In the described case, after removal of infected material with many implants by shaving to the galea, many additional implants remain behind. As epithelialization occurs, inflamed implants are removed to try to prevent their burial under the advancing epithelial margins. Retained implants which produce further inflammation will require individual extraction and removal. The patient must understand that this process may continue for months or years.

Patients treated for infection of these implants should be told that they may never be suitable candidates for autogenous hair transplants because of the unsuitability of the recipient areas. The recipient areas will be permanently scarred and subject to repeated episodes of infection from retained implants.

SUMMARY

A case is reported with treatment for widespread infection following implantation of synthetic hairlike fibers. Contrast has been emphasized between synthetic implants and medically valid methods of autogenous hair transplantation.

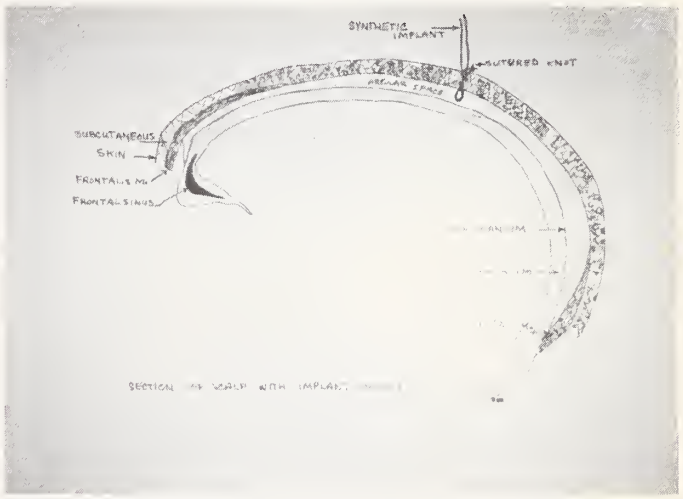


Figure 7—Diagram of coronal section through normal scalp and skull.

Jung-Hi Choe Lee, M.D., and the Department of Pathology, Englewood Hospital, prepared and interpreted the biopsies and photomicrographs presented herein.

REFERENCES

1. Orentreich N: Autographs in alopecia and other selected dermatological conditions. *Ann NY Acad Sci* 83:463-479, 1959.
2. Orentreich N: Hair problems. *J Am Med Wom Assoc* 21:481-486, 1966.
3. Vallis CP: Surgical treatment of the receding hairline. *Plast Reconstr Surg* 40:138, 1967.
4. Vallis CP: Surgical treatment of the receding hairline. *Plast Reconstr Surg:* 44:271, 1969.
5. Coiffman F: Use of square grafts for male pattern baldness. *Plast Reconstr Surg:* 60:288, 1977.
6. Devine J: Grafts combined with strip grafts for the treatment of male pattern baldness. *Plast Reconstr Surg.* 61:11, 1978.

Relapse of Whipple's Disease After Short-Term Antibiotic Treatment

WILLIAM M. BATTLE, M.D., HOWARD S. KROOP, M.D.
ANTHONY J. DiMARINO, JR., M.D., and
ERNEST REDFIELD, M.D., Woodbury

We report a patient with Whipple's disease who relapsed four years after short-term antibiotic treatment. Although Whipple's disease has an excellent prognosis, it may reoccur if inadequately treated. Various antibiotics are effective but penicillin and tetracycline are presently the drugs of choice. Long-term followup is necessary in these patients.

Whipple's disease is a rare multi-system disease with protean manifestations. Antibiotic therapy is now generally accepted as the treatment of choice but relapses have been reported.[1] We report a typical case of Whipple's disease which relapsed four years after treatment with tetracycline. This report stresses the necessity for long-term followup in these patients, and reviews the recent literature with respect to currently recommended therapeutic regimens and recent advances in the pathogenesis of Whipple's disease.

CASE REPORT

A 47-year-old white man presented to Underwood Memorial Hospital in July 1974 with a seven-month history of severe diarrhea, 40-pound weight loss and mild arthralgia. Stools were described as watery, non-mucoid, and non-bloody; they occurred up to 16 times a day. He denied abdominal pain, fever, chills, travel, alcohol abuse or previous gastrointestinal complaints.

Physical examination was remarkable by virtue of pallor, cachexia, and peripheral edema. Stools were positive for occult blood. The abdomen was protuberant with no organomegaly. Bowel sounds were normoactive.

Selected laboratory data included: serum iron 23 ug/dl; total iron-binding capacity 297 ug/dl; B_{12} normal; folic acid 2.3 mg/ml; hemoglobin 10 g/dl; hematocrit 29%; serum potassium 3.1 mEg/L; total protein 3.6 g/dl; albumin 2.0 g/dl; cholesterol 102 mg/dl; carotene 6 mg/dl (normal 60-180 mg/dl); thyroxine normal. Immunoglobulin levels were: IGM 29 mg/dl (normal 58-322); IGA 127 mg/dl (normal 73-407); IGG 920 (normal 660-1469). Stool cultures and examination for ova and parasites were negative for pathogens. Qualitative stool fat (Sudan stain) was markedly positive. Upper gastrointestinal series (figure 1), including small-bowel study disclosed market thickening of mucosal folds and mild dilatation of jejunum and proximal ileum.

A small intestinal biopsy revealed broad flat villi, periodic acid schiff (PAS) positive granular macrophages in the lamina propria and dilated lipid-laden lymphatics (figures 2 and 3). The biopsy was felt to be classic for Whipple's disease.

Treatment was started with tetracycline 250 mg., four times a day, along with procaine penicillin 600,000 units intramuscularly, once daily, for the first five days. There was immediate improvement with decreased diarrhea and a 30-pound weight gain over the next two months. He subsequently was lost to followup. Total treatment time with tetracycline was eight weeks.

In August 1978, he reappeared with severe diarrhea,

*From the Departments of Medicine and Sections of Gastroenterology, Hospital of the University of Pennsylvania and Underwood Memorial Hospital and the Department of Pathology, Underwood Memorial Hospital. Correspondence may be addressed to Dr. DiMarino at the Medical Arts Building, Suite 25, West Red Bank Avenue, Woodbury, New Jersey 08096.



Figure 1—Upper gastrointestinal series and small-bowel study shows thickening of the mucosal folds and dilatation of the jejunum and proximal ileum.

cachexia, extreme weakness, weight loss, edema, and skin hyperpigmentation. Hemoglobin was 4 g/dl and laboratory data were consistent with a malabsorption syndrome. Repeat small intestinal biopsy was again diagnostic for Whipple's disease. Tetracycline was started and immediate improvement resulted.

DISCUSSION

For 50 years after its initial description, Whipple's disease was considered an incurable disorder of fat metabolism (intestinal lipodystrophy). However, since the early reports of remission after antibiotic therapy, it has been considered a treatable disease with excellent prognosis.[23] The exact etiology is unclear although current evidence strongly suggests that microorganisms are involved in the pathogenesis of Whipple's disease. In spite of unsuccessful attempts at consistent culturing of an organism, bacteria-like agents have been demonstrated in tissue specimens. These agents share antigenic similarities with streptococci and shigella and show serological cross reactivity with material within the macrophages suggesting a causal relationship[4-6]. It generally has been assumed that host susceptibility played a role in pathogenesis since defects in cellular mediated immunity frequently have been demonstrated. A recently reported patient, however, had normal T-lymphocyte function suggesting immunological incompetence is not an essential prerequisite[6].

The classic clinical presentation is diarrhea, weight loss, steatorrhea, abdominal pain, arthralgia, and hyperpigmentation of the skin[7]. In over 80 percent of cases, the patient is a middle-aged white male. Extra-intestinal manifestations (joint symptoms are the most common) occur in over 60 percent of patients and may precede the diarrhea by

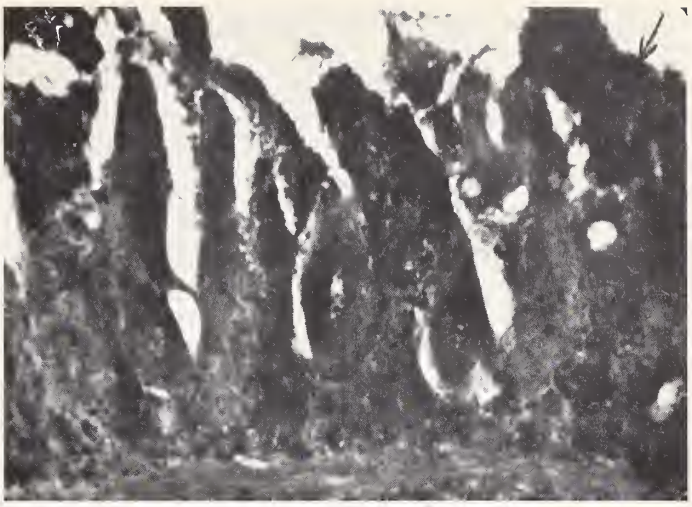


Figure 2—Small-intestine biopsy (approximately 100x) showing the large foamy cells in the lamina propria contain PAS-postive material characteristic of Whipple's disease.

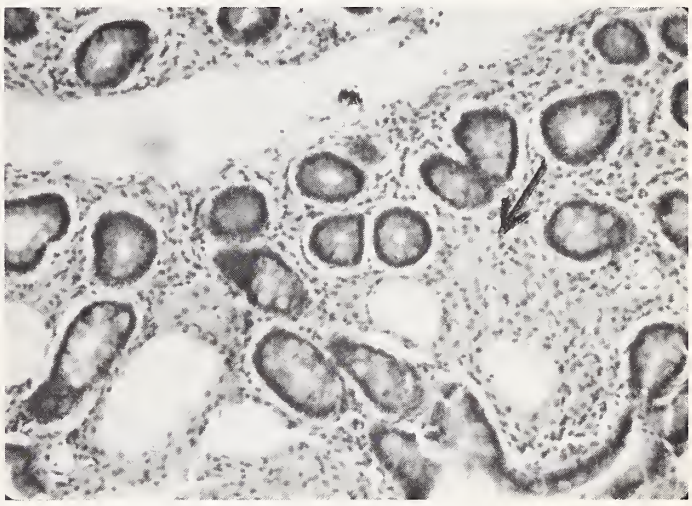


Figure 3—Small intestinal biopsy (approximately 200x) showing irregular glands, cystic clear spaces and large, pale, foamy cells in the lamina propria.

many years[1,7]. Other systemic manifestations include pleuropericarditis, valvular endocarditis, cardiac conduction defects secondary to an arteritis, ascites, myopathy, neurologic abnormalities and histiocytic infiltrates in the lung[8-14].

Peroral small intestinal biopsy is the diagnostic procedure of choice. The classic histopathology includes large macrophages with PAS positive granules which fill the lamina propria and markedly distend the villous architecture giving it a flat appearance similar to celiac disease. In addition the lymphatics are dilated and lipid-filled. With special high resolution light microscopy, or electron microscopy, gram positive bacilli can be visualized. Although classically taught to be a diffuse lesion, two recent reports suggest it may be patchy[15,16]. Also the route of infection may not always be in the intestine since bacilliform bodies have been demonstrated in peripheral lymph nodes in the absence of small intestinal involvement[16]. Rectal biopsy has been positive in some cases but it can be misleading and should not be used as a definitive test since PAS positive macrophages can be seen in normal patients as a result of melanosis coli[16].

Various antibiotics have been shown to be effective. These include chloramphenicol, tetracycline, azulfidine, ampicillin, penicillin, streptomycin and trimethoprim-sulphamethoxasole. Because relapses may occur after short courses of antibiotic treatment, as demonstrated by our case, newer therapeutic recommendations have emerged. Maizel *et al.*

"The exact etiology is unclear although current evidence strongly suggests that microorganisms are involved in the pathogenesis of Whipple's disease."

"Various antibiotics have been shown to be effective. These include chloramphenicol, tetracycline, azulfidine, ampicillin, penicillin, streptomycin and trimethoprim-sulphamethoxasole."

have suggested initial treatment with penicillin and streptomycin for 14 days, followed by 10 to 12 months of tetracycline[7]. Trier suggests the best drug is penicillin given parenterally until clinical improvement occurs (usually 10 days) and then orally until improvement is documented on small-bowel biopsy (usually two to four months)[18]. Patients rarely relapse when treated with either of these regimens. Some authors have recommended yearly biopsy of the small intestine after treatment since reappearence of the bacilli may predict impending relapse in an asymptomatic patient[3]. Although once considered rational treatment, steroids should not be used unless there is concomitant pituitary or adrenal insufficiency from severe malnutrition.

In general, the prognosis of Whipple's disease is excellent and patients are asymptomatic one to three months after initiation of treatment. This case report emphasizes the necessity for long-term followup in these patients.

SUMMARY

Whipple's disease is a rare multisystem disease which has an excellent prognosis if recognized and treated. The etiology remains unclear but agents which share antigenic similarities with streptococci and shigella have been demonstrated in tissue specimens. Although classically considered mainly as a cause of malabsorption, Whipple's disease may have protean systemic manifestations which can delay a correct diagnosis or lead to misdiagnosis. Extra-intestinal manifestations may precede the diarrhea by many years. Peroral small-intestinal biopsy is the diagnostic procedure of choice. Infiltration of the lamina propria with PAS positive macrophages, dilated lipid-laden lymphatics and a flat mucosal appearance are characteristic findings. Penicillin and tetracycline are the drugs of choice and long-term treatment and followup are necessary to prevent recurrence.

REFERENCES

1. Ruffin JM, Kurtz SM, Roufail WM: Intestinal lipodystrophy (Whipple's disease). *JAMA* 195:476-478, 1966.

2. Paulley JW: A case of Whipple's disease. *Gastroenterol* 22:128-133, 1952.

3. Trier JS, Phelps PC, Eidelman S, Rubin CE: Whipple's disease: Light and electron microscopic correlation of jejunal mucosal histology with antibiotic treatment and clinical status. *Gastroenterol* 48:684-707, 1965.

4. Clancy RL, Tomkins WAF, Muckle TJ, Richardson H, Rawls WE: Isolation and characterization of an etiological agent in Whipple's disease. *Br Med J* 3:568-570, 1975.

5. Keren DF, Weisburger WR, Yardley JH: Whipple's disease: Demonstration by immunofluorescence of similar bacterial antigens in macrophages from three cases. *Johns Hopkins Med J* 139:51-59, 1976.

6. Kirkpatrick PM, Kent SP, Mihas A, Pritchett P: Whipple's disease: A case report with immunological studies. *Gastroenterol* 75:297-301, 1978.

7. Maizel H, Ruffin JM, Dobbins WO: Whipple's disease: A review of 19 patients from one hospital and a review of the literature since 1950. *Medicine* 49:175-201, 1970.

8. Pastor BM, Geerhen RG: Whipple's disease presenting as pleuropericarditis. *Am J Med* 55:827-831, 1973.

9. Kraunz, RF: Whipple's disease with cardiac and renal abnormalities. *Arch Intern Med* 123:701-706, 1969.

10. James TN, Haubrich WS: Bacterial arteritis in Whipple's disease. *Circulation* 52:722-731, 1975.

11. Isenberg JI, Gilbert SB, Pitcher JL: Ascites with peritoneal involvement in Whipple's disease. *Gastroenterol* 60:205-305, 1971.

12. Swash M. Schwartz MS, Vandenburg MS, Pollock DJ: Myopathy in Whipple's disease. *Gut* 18:800-804, 1977.

13. Knox DL, Bayless TM, Pittman FE: Neurologic disease in patients with treated Whipple's disease. *Medicine* 55:467-476, 1976.

14. Winberg CD, Rose ME, Rappaport H: Whipple's disease of the lung. *Am J Med* 65:873-880, 1978.

15. Moorthy, S, Nooley G, Hermos JA: Whipple's disease with minimal intestinal involvement. *Gut* 18:152-155, 1977.

16. Mansbach CM, Shellburne JD, Stevens RD, Dobbins WO: Lymph-node bacilliform bodies resembling those of Whipple's disease in patient without intestinal involvement. *Ann Intern Med* 89:64-66, 1978.

17. Caravati CM, Litch M, Weisiger BB, Raglang S, Berliner H: Diagnosis of Whipple's disease by rectal biopsy. *Ann Intern Med* 58:166-170, 1963.

18. Trier JS: Whipple's disease. In: *Gastrointestinal Disease.* MH Sleisenger, and JS Fordtran (Eds). Philadelphia, W.B. Saunders Co., 1978, pp. 1103-1115.

Chronic Granulocytic Leukemia with Normal Leukocyte Alkaline Phosphatase Score in a Patient Receiving LithiumCarbonate

PETER SCHOTTLANDER, B.A., PAUL A. LITKA, M.D. and
YALE S. ARKEL, M.D., Newark*

This report describes a patient with chronic granulocytic leukemia and a "normal leukocyte alkaline phosphatase" score. The patient had been receiving lithium carbonate therapy for psychosis. The alkaline-phosphatase staining characteristics of this patient's leukocytes, consisting of two populations of cells with strong and absent alkaline phosphatase activity, are described, and the possible relationship of this finding to chronic lithium administration is considered.

This paper reports the development of Philadelphia (ph') chromosome positive chronic granulocytic leukemia in a patient receiving chronic lithium carbonate therapy. An unusual distribution of alkaline phosphatase activity among the patient's neutrophiles is described.

CASE REPORT

A 37-year-old woman was treated with lithium carbonate, 600 mg three times a day, isocarboxazid, and trifluoperazine for manic-depressive psychosis for five years. One month earlier, routine blood counts had revealed leukocytosis for which the patient was referred for evaluation.

The patient was asymptomatic except for a vague sense of fatigability of one month's duration.

Physical examination revealed only splenomegaly, the spleen extending four cm. below the left costal margin.

The white blood count was $33x10^3$/cu mm. A differential count of 42% neutrophils, 23% band forms, 24% metamyelocytes, 3% myeloctyes, 1% eosinophils and 7% lymphocytes was obtained. The platelet count was $420x10^3$cu mm. Serum lactic dehyrogenase activity was 400 MU/ml (N:100-225 MU/ml). The B_{12} level was 1650 pg/ml (N:260-1400 pg/ml). The B_{12} binding capacity 1922 pg/ml (N:1000-2000 pg/ml), and the folic acid level 7.3 ng/ml (N> 3.0 ng/ml).

A bone marrow aspirate showed myeloid and megacaryoctyic hyperplasia. The myeloid:erythroid ratio was 10:1. The erythroid series exhibited megaloblastic features. A needle biopsy of bone marrow confirmed the findings on aspiration, and additionally showed absence of marrow collagen and diffuse increase in reticulin fibers.

The Philadelphia chromosome was demonstrated on cytologic study of a bone marrow specimen.[a] Leukocyte alkaline phosphatase score, determined after staining by standard methods with commercial reagents, was 94.[1] (Normal control 102, high control 192, range 13-130). This unexpectedly high alkaline phosphatase activity was based on the presence of a population of 4+ reactive neutrophils amid the larger population of nonreacting cells.

DISCUSSION

With the exception of a "normal" leukocyte alkaline phosphatase score, this case exhibits typical clinical, morphologic and cytogenetic features of chronic granulocytic leukemia. It is interesting to speculate on the relationship between lithium administration and the biphasic distribution of leukocyte alkaline phosphatase activity which

*Mr. Schottlander is a senior medical student at New Jersey Medical School, CMDNJ; Dr. Litka is a Fellow in Hematology at Saint Michael's Medical Center, Newark; and Dr. Arkel is Director of Hematology/Oncology at the same institution. Correspondence may be addressed to Dr. Arkel at the Medical Center (Department of Hematology), 268 High Street, Newark 07102.

[a]Cytogenetic Laboratory—New Jersey Medical School, (CMDNJ, Newark).

"With the exception of a 'normal' leukocyte alkaline phosphatase score, this case exhibits typical clinical, morphologic and cytogenetic features of chronic granulocytic leukemia."

". . . lithium stimulates granulocyte proliferation in vivo, causes an elevation of serum B_{12} and unsaturated serum B_{12} binding capacity, supporting the concept that lithium-induced granulocytosis is a result of an increase in the . . . granulocyte pool."

gave this patient a normal score. Could lithium have stimulated a normal myeloid clone in an already leukemic marrow?

Tisman *et al.* have shown that lithium stimulates granulocyte proliferation *in vivo,* causes an elevation of serum B_{12} and unsaturated serum B_{12} binding capacity, supporting the concept that lithium-induced granulocytosis is a result of an increase in the total body granulocyte pool.[2] It has been suggested that lithium can trigger colony-stimulating factor production by human monocytes[3] and also can potentiate the action of colony stimulating factor.[4]

Lithium has been proposed as being of potential therapeutic benefit in view of its ability to shorten the duration of neutropenia in the setting of leukemia induction[5] and to moderate neutropenia in the chemotherapy of non-hematologic malignancy.[6]

Thus, it appears that lithium can exert an indirect stimulatory effect on granulopoiesis which eventuates in an increase in the total body granulocyte pool. One might question whether the presence of a population of leukocyte alkaline phosphatase positive cells in our patient did not reflect this stimulatory effect. Whether lithium administration can induce the leukemic state remains to be explored.

As far as we could determine, this is the only reported case of chronic granulocytic leukemia in a patient who received lithium on a long-term basis.

REFERENCES

1. The Histochemical Demonstration of Acid and Alkaline Phosphatase. Sigma Technical Bulletin No. 85 (1-71).
2. Tisman G, Herbert V, Rosenblatts A: Evidence that lithium induces human granulocyte proliferation: Elevated serum vitamin B_{12} binding capacity *in vivo* and granulocyte colony proliferation *in vitro*. *Br J Haematol* 24:767-770, 1973.
3. Harker GW, Rothstein G: Stimulation of neutrophil production by lithium. *Clin Res* 24:103A, 1975.
4. Morley DC Galbraith PR: Effect of lithium ions on granulopoiesis *in vitro*. 24:671A, 1976.
5. Charron D, Barrett AJ, Faille A, Alby N, Schmitt T, Degos L: Lithium in acute myeloid leukemia. *Lancet* i:1307, 1977.
6. Stein RS, Bzaman C, Ali MY, Hansen R, Jenkins D, Jung HG: Lithium carbonate attenvation of chemotherapy-induced neutropenia. *N Engl J Med* 297:430-431, 1977.

Rupture of Thoracic Aneurysm into the Right Pleural Space*

RONALD M. ABEL, M.D., JOSEPH ALPERT, M.D., DANIEL FISCH, B.A., ISAAC GIELCHINSKY, M.D. and VICTOR PARSONNET, M.D., Newark

Free rupture of the descending thoracic aorta into the right pleural space with fatal outcome occurred in two patients. Successful surgical therapy depends on a precise preoperative anatomical diagnosis within the limitations of the patient's precarious condition. When this is not feasible, the distal thoracic aorta should be examined on the right side if no other apparent source of the rupture can be identified.

Rupture of the thoracic aorta, secondary to acquired degenerative diseases or to trauma, carries an exceedingly high mortality rate. In individuals with a left-sided aortic arch and a thoracic aorta which descends to the left of the vertebral column, most free ruptures of the supradiaphragmatic aorta will occur into the left pleural space. We recently encountered two patients who presented in a moribund state with thoracic aneurysms of different etiology and who required urgent surgical intervention due to unexpected rupture into the right pleural space. Neither patient survived. This report describes these cases in detail and outlines the anatomic considerations which, in retrospect, might have enabled accurate ante-mortem diagnosis and possible patient salvage.

CLINICAL MATERIAL

Case #1—A 63-year-old financier had been in excellent health with the exception of essential hypertension until 18 hours before admission when he experienced the sudden onset of severe low back pain. He gave a past history of a renal calculus and also had complained of intermittent, mild, low back pain from degenerative disk disease for many years; he had undergone a lumbar disk fusion 30 years earlier.

At the time of admission this moderately obese patient was found to have a blood pressure of 112/70 mm Hg and a heart rate of 80 beats/min. He was afebrile. Pertinent physical findings included a grade III/VI non-radiating systolic murmur heard best at the cardiac apex. Abdominal examination revealed a marked decrease in bowel sounds and tenseness with distension.

Localized right upper-quadrant pain made biliary or renal colic a possible diagnosis. Abdominal (Figure 1) and chest x-rays (Figure 2) were not interpreted as demonstrating any aortic aneurysm. Abdominal ultrasonogram also failed to demonstrate an abdominal aortic aneurysm. Shortly after admission the patient was taken to the radiology suite for excretory urography. While reviewing the initial urogram, the patient's blood pressure suddenly fell to 80/60 mm HG and the heart rate increased to 100 beats/min. Normal saline was infused rapidly, but vasoconstriction and shock remained. Since the urogram showed minimal abdominal calcification with lateral deviation of the left ureter, the patient was prepared for urgent surgery with a presumptive diagnosis of a ruptured abdominal aortic aneurysm.

Cardiac arrest occurred shortly thereafter, and the patient was brought to the operating room while continued closed-chest cardiac massage was in progress. A midline abdominal incision was made rapidly but no aneurysm was found, although there was a hematoma noted at the diaphragmatic crura. Palpation of the suprarenal abdominal aorta yielded a flaccid aorta presumably due to profound hypovolemia with

*From the Divisions of Thoracic and Cardiovascular and Peripheral Vascular Surgery, Newark Beth Israel Medical Center, 201 Lyons Avenue, Newark, NJ 07112. Correspondence may be addressed to Dr. Abel at the Medical Center.



Figure 1—Lateral abdominal x-ray of patient #1. A calcified abdominal aorta is present, most notably in the upper portion. The width of the suprarenal aorta is also somewhat increased, but no discrete aneurysm is present.

a suggestion of widening just below the diaphragm. Due to unremitting cardiac arrest, the left chest was explored. The descending thoracic aorta was diffusely diseased; there was a discrete, arteriosclerotic aneurysm occupying the distal half of the aorta with minimal mediastinal hematoma. There was 100 ml of serosanguinous effusion on the left. The explanation for the patient's cardiac arrest presumably due to hypovolemia was not immediately apparent. Continued resuscitative efforts were to no avail.

At postmortem examination a thoracic saccular arteriosclerotic aneurysm that had ruptured into the right pleural space was found. The entire right pleural cavity was filled with fresh blood and clots and there was extensive periaortic and periesophageal hematoma formation. The site of rupture (Figures 3A,B) was just above the diaphragm with an exit point into the right pleural space. Additionally a very small abdominal aortic aneurysm which had not ruptured was noted.

Case # 2—This previously healthy 55-year-old man entered an outside hospital with a history of the sudden onset of girdle-like anterior chest pain which migrated rapidly toward the epigastrium. An electrocardiogram was within normal limits. Chest roentgenograms revealed a widened mediastinum and a tentative diagnosis of dissection of the aorta was made. Although not present at the time of admission, approximately six hours later, a faint murmur of aortic regurgitation was appreciated. Antihypertensive therapy was started with an initial blood pressure of 140/90 mm Hg.



Figure 2—Plain antero-posterior chest x-ray of patient #1. Moderate cardiomegaly and prominence of the ascending aorta are visible. There are no pleural effusions.

Approximately 12 hours later, the patient had a sudden increase in chest pain, and his blood pressure became transiently unobtainable. With rapid administration of intravenous fluids, a systolic blood pressure of 90-100 mm Hg was obtained. Repeat chest x-rays (Figure 4) revealed opacification of the right pleural space. A diagnosis of dissection of the thoracic aorta and rupture into the right pleural space having been made, the patient was then transferred to the Newark Beth Israel Medical Center.

On admission, he was alert, but apprehensive. The pulse was 120 and regular; blood pressure was 85/60 mm Hg with approximately 20 mm of pulsus paradoxicus. All peripheral pulses were full and equal. A faint diastolic murmur at the cardiac base was heard. There was some epigastric tenderness, but bowel sounds were present. Approximately 45 minutes later, as the aortography suite was being prepared, the patient suddenly developed signs of pericardial tamponade with resultant complete loss of peripheral arterial pulses during deep inspiration. An intravenous infusion of dopamine was begun when the systolic arterial blood pressure was 80 mm Hg.

With the signs of worsening pericardial tamponade and the "obvious" source of rupture of the dissection in the ascending aorta, the patient was immediately transported to the operating room. A median sternotomy was performed and the left common femoral artery and vein cannulated after which partial cardiopulmonary bypass was instituted. A tense pericardium was filled with blood. The right pleural space also was filled with fresh and clotted blood, but we were unable to explain the source of the hemorrhage. No site of rupture of the ascending aorta was found. After aortic clamping, a transverse incision in the ascending aorta revealed a complete dissection of the aorta extending to the aortic root and including the aortic valve, but an intimal tear in the ascending aorta could not be found. The patient was then cooled further from 28°C to 14°C following which a five-minute period of circulatory arrest was instituted and aortic clamp removed. The transverse aortic arch was examined intraluminally, but the intimal tear was not found. Air was evacuated from the aortic arch, the aortic clamp was replaced, and resection of the ascending aorta performed. The aortic valve was resuspended with Teflon-buttressed sutures and a three cm segment of the ascending aorta, two cm above the coronary ostia, was replaced with a woven



Figure 3A—Distal thoracic and abdominal aorta; postmortem specimen from Case #1.



Figure 3B—The site of rupture is apparent on the right side of the thinnest portion of the aneurysm.

Teflon graft buttressed with Teflon felt inside and out. Following removal of the clamp, however, a persistent intimal tear distal to our operative field was evident because the adventitia continued to bulge up to the site of the distal suture line and continued to bleed massively. This hemorrhage could not be controlled, and the patient was pronounced dead in the operating room.

Postmortem examination revealed a descending thoracic aortic dissection with an intimal tear in the "usual" place, that is, just distal to the left subclavian artery (beyond the reaches of visual inspection at the time of operation). The site of rupture was in the right portion of the descending thoracic aorta just above the diaphragm (Figure 5).

COMMENT

Both patients died as a result of a lethal complication of thoracic aortic aneurysm, namely, uncontrolled free rupture into a pleural space. Failure to recognize the *possibility* of a right pleural rupture from the descending thoracic aorta clearly was the proximate cause of death in Case #2, although the signs of increasingly severe pericardial tamponade and aortic regurgitation dictated an anterior operative approach[2].

The incidence of rupture of an aortic dissection is difficult to assess, but it is rare and nearly uniformly fatal due to rapid exsanguination In Glendy, Castleman, and White's classic review[3], they observed that two of 19 cases of acute aortic dissections were associated with rupture into the right pleural space. One additional patient was reported to have survived for three months following rupture of an aortic dissection into the left hemithorax but finally succumbed after a second tear caused exsanguination[1]. Hirst and coworkers[5] reviewed a large series of dissections of the aorta and reported an overall incidence of a 7.1 percent rupture into the right hemithorax as compared with 27.1 percent into the left. These data are comparable to those of Gore and Seiwert[4], 5.8 and 13 percent respectively, with a 7.2 percent incidence of bilateral pleural rupture.

It is difficult to uncover many patients in the literature who have survived such a complication, due to immediate death or possibly due to failure to associate right pleural hemorrhage with descending aortic rupture.

Although the "natural history" of arteriosclerotic fusiform or/saccular aneurysms of the thoracic aorta is not as well understood as infradiaphragmatic aneurysms, McNamara and Pressler[6] recently have confirmed that large arteriosclerotic aneurysms of the thoracic aorta tend to rupture and this rupture correlates with size. That is, of nine patients in their review of 28 arteriosclerotic aneurysms who died of free rupture, all but one occurred in aneurysms greater than ten cm in diameter. Schechter and Held[7] also reported a single patient who presented with a right-sided extra pleural hematoma from a ruptured fusiform aneurysm in the descending thoracic aorta. Their patient did not survive.

Case #1 was unusual in that chest pain was absent but low back pain was present. "Significant" right upper-quadrant abdominal findings focused attention on right-sided abdominal and retroperitoneal structures. In retrospect, radiation of the pain to the right upper quadrant of the abdomen as a result of an expanding hematoma in the right posterior mediastinum is consistent with radiation along the in-



Figure 4—Case #2. Chest x-ray obtained one hour following sudden increase in chest pain with onset of shock. Opacification of the right hemithorax with an obvious large right pleural effusion is apparent. In addition, the aortic knob is ill-defined and evidence of mediastinal hematoma formation is apparent by the widened carina.

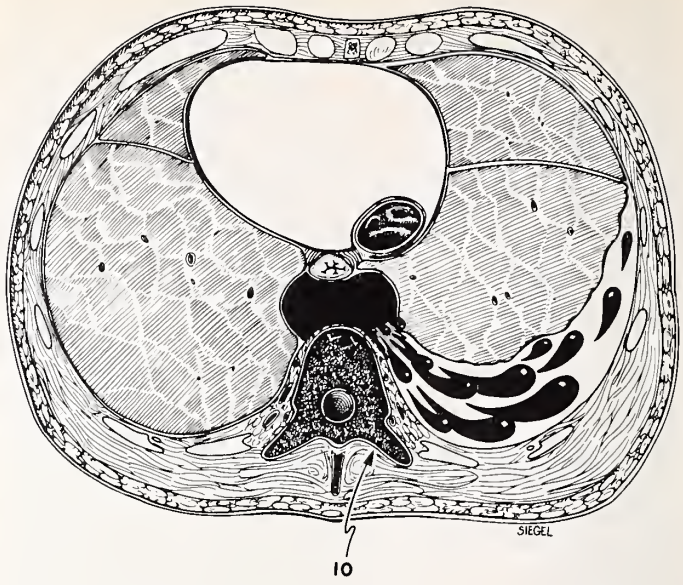


Figure 5—Diagrammatic representation of the site of rupture in Case #2. At approximately the level of the 10th thoracic vertebra, a direct communication from the false lumen of the aneurysm into the free right pleural space was identified.

tercostal nerve distribution.

The anatomical considerations appear obvious only in retrospect. The bony vertebral column barrier on the right and posterior aspects of the descending thoracic aorta should preclude rupture of the thoracic aorta in its distal portion to the right side. Most ruptures have, therefore, occurred toward the left. An exception to this rule is in the patient with a luetic aneurysm in which bony erosion could lead to a point of weakness on the right.

Neither patient had preoperative aortograms. This was not feasible in patient #1 since he had sustained a cardiac arrest secondary to exsanguination shortly after admission. In patient #2, progressive pericardial tamponade and aortic regurgitation demanded immediate surgery without loss of time for aortography. The surgical management would have been difficult at best even had a precise anatomic diagnosis been made beforehand. Although the distal intimal tear along with the site of free rupture would have had to be repaired, the patient still required an anterior approach to correct the aortic root disease. Had the precise anatomical diagnosis been apparent preoperatively, a bilateral transsternal thoracotomy would have been a preferable incision to approach the problem.

SUMMARY

Rupture of thoracic aneurysms into a pleural space is rare and usually lethal when it occurs. Two patients are presented with free rupture of an aneurysm in the distal descending thoracic aorta into the *right* pleural space, an anatomic possibility which was not immediately recognized. In the first patient, a rupture of a saccular, arteriosclerotic aneurysm into the right pleural space presented initially with abdominal findings but exsanguination precluded surgical resection. In the second, rupture of the false lumen of an aortic dissection into the right pleural space was due to a Type III dissection which also had produced aortic incompetence and pericardial tamponade. Recognition that a thoracic aneurysm can present with rupture into the right pleural space is necessary to select appropriate therapy and offer a chance for survival even under the most dire of circumstances.

REFERENCES

1. Campbell M: Dissecting aneurysm with survival for three months after rupture into the pleura. *Brit Heart J* 8:200, 1946.

2. Cipriano PR and Griepp RB: Acute retrograde dissection of the ascending thoracic aorta. *Am J Cardiol* 43:520, 1979.

3. Glendy RE, Castleman D and White PD: Dissecting aneurysm of the aorta: A clinical and anatomical analysis of nineteen cases (thirteen acute) with notes on the differential diagnosis. *Am Heart J* 13:129, 1937.

4. Gore I and Seiwert VJ: Dissecting aneurysm of the aorta: pathologic aspects. An analysis of eighty-five fatal cases. *Arch Path* 53:121, 1952.

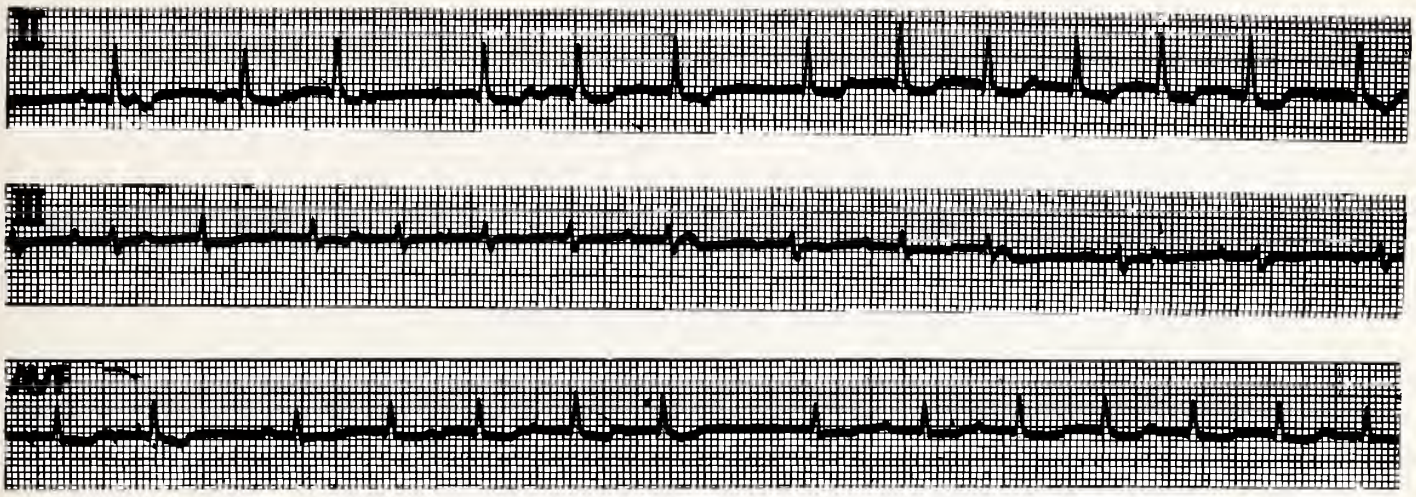
5. Hirst AE, Johns VJ, Kine SW: Dissecting aneurysms of the aorta: A review of 505 cases. *Med* 37:217, 1958.

6. McNamara JJ and Pressler VM: Natural history of arteriosclerotic thoracic aortic aneurysms. *Ann Thorac Surg* 26:468, 1978.

7. Schechter LS and Held BT: Right-sided extrapleural hematoma: An unusual presentation of ruptured aortic aneurysm. *Chest* 65:355, 1974.

Chaotic Atrial Mechanism

EDWIN L. ROTHFELD, M.D., Newark*



Leads II, III, and AVF were recorded on a 72-year-old man admitted to the hospital because of respiratory insufficiency due to long-standing, obstructive pulmonary disease. He had not taken any cardioactive drugs. Arterial blood gas analysis indicated severe hypoxemia, hypercarbia and uncompensated respiratory acidemia. He died in pulmonary and right heart failure four days after this ECG was recorded.

These strips show discrete P-waves of multiple forms, some of which are blocked while others are conducted to the ventricles with varying P-R intervals. There is also marked variation in P-P and R-R intervals, and there is conspicuous absence of a single, dominant atrial pacemaker. This distinctive arrhythmia is an example of chaotic atrial mechanism (CAM).

CAM was originally described by Phillips, Spano and Burch as an atrial arrhythmia characterized by three or more P-waves in a single lead, absence of a basic sinus rhythm and variable P-P, R-R and P-R intervals.[1] They studied 31 patients with CAM and found that they were elderly (mean age 68.5 years) and had a striking prevalence of serious, obstructive pulmonary disease (83.9 percent).

The best therapeutic approach seemed to be directed at the underlying lung disease; most anti-arrhythmic drugs proved ineffective or dangerous. Despite these measures, 16 of the 31 (52 percent) died during their hospital stay, most within 45 days of the onset of CAM.

Shine and Lipson published nearly identical findings in patients with an arrhythmia they called "multifocal atrial tachycardia."[2,3] They differed only in that one of their criteria for the diagnosis was an atrial rate faster than 100 per minute. I prefer the term "CAM" because in my experience the atrial rate may be less than 100 per minute.

I have collected 44 cases of CAM in the past year from nearly 32,000 tracings obtained in the Heart Station of the Newark Beth Israel Medical Center. There were 29 men and 15 women, and the average age was 71 years. Thirty-two (73 percent) of these patients had advanced obstructive pulmonary disease with major blood gas abnormalities. There were 28 (64 percent) in-hospital deaths, most of which occurred within two weeks of admission. The usual anti-arrhythmic agents proved ineffective, and digitalis often produced toxic manifestations in relatively small doses.

SUMMARY

CAM is an important arrhythmia that occurs typically in elderly people with advanced obstructive pulmonary disease. It is characterized by discrete P-waves of three or more forms in a single lead, isoelectric intervals between the P-waves, varying P-P, P-R and R-R intervals, and absence of a dominant atrial pacemaker. These features serve to distinguish CAM from arrhythmias that mimic it, i.e., atrial fibrillation, atrial flutter, atrial tachycardia with variable

*Dr. Rothfeld is Director of the Heart Station and of the Coronary Care Unit of Newark Beth Israel Medical Center, and Associate Professor of Medicine at New Jersey Medical School, CMDNJ. He is a consultant to the editorial staffs of the *American Journal of Cardiology* and the *Journal of the American College of Chest Physicians*.

block, sinus rhythm with multiple atrial premature impulses and "wandering" atrial pacemaker. The prognosis is poor; most anti-arrhythmic agents are ineffective or harmful and therapy should be aimed at the underlying respiratory insufficiency.

REFERENCES

1. Phillips J, Spano J, and Burch G: Chaotic atrial mechanism. *Am Heart J* 78:171, 1969.
2. Shine KI, Kastor JA, and Yurchak PM: Multifocal atrial tachycardia. *N Engl J Med* 279:344, 1968.
3. Lipson MJ and Naimi S: Multifocal atrial tachycardia. *Circulation* 42:397, 1970.

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

THERAPEUTIC DRUG INFORMATION

This information is compiled by the Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Arnold and Marie Schwartz College of Pharmacy and Health Sciences, Long Island University.*

1. Please provide me with information concerning the new tetracyclic antidepressant—mianserin.

Mianserin, developed by Organon, is a new tetracyclic antidepressant currently under investigation in the United States. Although originally developed as an antihistamine-antiserotonin agent for treating allergies, it was shown to possess mood-elevating and sedative effects. Clinical studies have indicated that mianserin has overall efficacy in treating depressive illness comparable to amitriptyline (sold as Elavil®) and imipramine (sold as Tofranil ®), with anti-anxiety effects similar to those of diazepam (sold as Valium®). The drug does not influence the re-uptake of amines (as do the tricyclics) nor is it a monamine oxidase inhibitor. Also unlike the tricyclics, mianserin does not significantly decrease the antihypertensive effects of guanethidine (sold as Ismelin®) or clonidine (sold as Catapres®. Mianserin also has been shown to produce fewer cardiovascular and anticholinergic side effects than the tricyclic antidepressants.[1-3]

Coppen *et al.*[2] investigated the antidepressant activity of mianserin and compared it to amitriptyline in 39 patients suffering from primary depressive illness. The efficacy of both drugs appeared similar but the incidence of side effects was significantly higher with amitriptyline.

Wheatley[3] conducted a double-blind study to compare the effectiveness of mianserin and amitriptyline in 79 depressed patients. The antidepressant effects of both drugs were not statistically different as well as the overall incidence of side effects. Drowsiness was more common in the mianserin group (28 vs. 15 percent) and dry mouth was more common in the amitriptyline group (20 vs. 10 percent).

Russell and associates[4], in a double-blind trial, compared the antidepressant effects of mianserin to diazepam in 46 patients with moderate to severe degrees of depression. The authors found mianserin as effective as diazepam in reducing anxious depression but more effective than diazepam in reducing other types of depression. Very few side effects were encountered with either drug. However, a major epileptic seizure associated with mianserin has been reported recently.[5]

In conclusion, it appears that mianserin is a useful antidepressant with anti-anxiety properties. It may produce fewer cardiovascular and anticholinergic side effects than the tricyclic antidepressants. Since mianserin does not influence the uptake of amines, its antidepressant effects are difficult to reconcile with the biogenic amine theory of affective disorders.

REFERENCES

1. Anon: *Facts and Comparisons*. St. Louis, Mo., 1978, p. 775.
2. Coppen A *et al:* Mianserin hydrochloride: A novel antidepressant. *Br J Psych* 129:342-345, 1976.
3. Wheatley D: Controlled clinical trial of a new antidepressant (Organon GB 94) of novel chemical formulation. *Curr Ther Res* 18:849-853, 1975.
4. Russell GF *et al:* Comparative double-blind trial of mianserin hydrochloride (Organon GB 94) and diazepam in patients with depressive illness. *Br J Clin Pharmacol* 5 (suppl) 1:57S-65S, 1978.
5. Mikhail WI: Epileptogenic effect of mianserin. *Lancet* 2:969, (Nov) 1979.

2. Do you have any information concerning the topical use of boric acid for treatment of cold sores?

Boric acid is known to have weak bacteriostatic and fungistatic activities.[1] In the form of various solutions, powders and ointments, it has been used widely as a mild non-irritant topical antiseptic for the treatment of inflammation of the skin, mucous membranes and wounds.[2]

Skinner and Hartley[3] studied the effects of boric acid in patients with cold sores and *in vitro* on two types of herpes simplex viruses. In a double-blind trial, fourteen patients were given a 4 percent boric acid ointment for topical application four times a day for five days. Eleven other patients used a placebo ointment in an identical fashion. After one week, 13 of the 14 patients who used the active preparation reported improvement in their condition while only three in the control group reported positive results. No adverse effects were seen. The *in vitro* portion of the study involved tissue cultures of herpes viruses incubated with different concentrations of sodium borate. It was observed that a 20 m.mol/L or higher concentrations inhibited virus replication. No cytopathic effects were seen. The investigation suggested that this inhibition of viral replication may be dependent on cessation of cell protein synthesis.

*The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained parmacists: Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Arnold and Marie Schwartz College of Pharmacy and Health Sciences, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 5 p.m.—telephone (212) 622-8989 or 330-2735. Responses to these questions were prepared by J.M. Rosenberg, Ph.D., Pharm D.; H. Boothe, B.S.; G. Chishti, M. Pharm.; P. Sangkachand, M.S.

In conclusion, a preliminary report suggested that boric acid was effective as a local anti-herpetic agent. Intoxication has been reported from topical use of boric acid.[4] Further trials concerning the antiherpetic effects of boric acid appear to be warranted.

REFERENCES

1. Anon: *Martindale, The Extra Pharmacopeia,* 27th Ed. London, Pharmaceutical Press, 1977, p. 271.
2. Anon: *United States Dispensatory,* 27th Ed. Philadelphia, Lippincott, 1973, p. 199.
3. Skinner GRB and Hartley CE: Possible treatment for cold sores. *Br Med J* 2:704 1979.
4. Anon.: *The Pharmacological Basis of Therapeutics,* 5th Ed. New York, Macmillan Publishing Company, 1975, p. 994.

3. Does fenfluramine have an anti-diabetic effect?

Fenfluramine (sold as Pondimin®) is an anorectic drug structurally related to amphetamine.[1] However, unlike the amphetamines, fenfluramine at therapeutic doses produces central nervous system depression more often than stimulation and does not raise blood sugar levels.[2] In fact, there is some evidence that fenfluramine actually lowers blood glucose levels independently of its appetite suppressant effect.[3]

Butterfield and Wichlow[4] and Turtle and Burgess[5] have shown that glucose uptake by muscle is increased by fenfluramine in humans. Data also indicated that fenfluramine treatment of obese, maturity-onset diabetes resulted in less insulin needed to maintain the same level of glucose tolerance.[3]

Ten obese female diabetics participated in a single-blind crossover study.[6] Under supervision, these subjects consumed a 1200 calorie diabetic diet and received both fenfluramine and placebo each singly for seven days. The intravenous glucose-tolerance test revealed moderate falls in the 24-hour blood glucose levels during fenfluramine treatments. Since the patients consumed the same amount of calories in the periods of fenfluramine and placebo treatment, and no significant weight loss was found in either period, these findings support the hypothesis that fenfluramine has a blood glucose lowering effect independent of its anorexigenic action. The hypoglycemic effect, however, was small and much less pronounced than the effects of sulfonylureas or biguanides.[6]

In a random allocation trial, the hypoglycemic action of fenfluramine was compared with that of phenformin (formerly sold as DBI, Meltrol) in 16 obese diabetics. Patients were first placed on eight weeks of dietary restriction of carbohydrates and a routine oral glucose-tolerance test was performed. Subjects were divided randomly into two equal groups, one received phenformin 50 mg. twice daily and the other fenfluramine 20 mg. four times daily. After two months, the glucose-tolerance tests were repeated. The results indicated that there was a significant improvement in glucose tolerance in both groups of patients, but the improvement was better in the fenfluramine-treated group.

Trygstad *et al.*[8] described a case where fenfluramine—60 mg. twice daily—was used successfully to treat a 15-year old female diabetic who exhibited high-fasting blood sugar, hyperlipidemia and insulin resistance.

In conclusion, several studies suggest that fenfluramine may exhibit some anti-diabetic activity independent of its anorexic effect..

REFERENCES

1. Bowker CH: The possible mode of action of fenfluramine in the treatment of diabetes: A Review. *Curr Med Res Opin* (Supp. 1) 6:203-206, 1979.
2. Kasowski MS: Obesity: Use of fenfluramine. (Discussion at International Symposium in Montreal) *Can Med Assoc J* 119:1436-1438, 1978.
3. Craddock D: Anorectic drugs: Use in general practice. *Drugs* 11:378-393, 1976.
4. Butterfield WJH and Wichlow MJ: Fenfluramine and muscle glucose uptake in man. *Lancet* 2:109, 1968.
5. Turtle JR and Burgess JA: Hypoglycemic action of fenfluramine in diabetes mellitus. *Diabetes* 22:858-867, 1973.
6. Larsen S *et al:* Metabolic effects of fenfluramine in obese diabetics. *Br J Clin Pharmacol* 4:529-533, 1977.
7. Kesson CM and Ireland JT: Phenformin compared with fenfluramine in the treatment of obese diabetic patients. *Practitioner* 216:577-580, 1976.
8. Trygstad O *et al*: Lipodystropic diabetes treated with fenfluramine. *Int J Obesity* 1:287-292, 1977.

YOUR SENATOR SPEAKS

National Health Insurance

THE HONORABLE HARRISON A. WILLIAMS, JR., Washington, D.C.*

Physicians and legislators share a common goal of improving the quality of life for the people we serve. When I arrived in the Senate in 1959, the Committee on Labor and Human Resources was beginning to explore the inadequacies of the health care delivery system and their devastating impact on the quality of life in America.

In its studies, our Committee discovered that a large proportion of this country's elderly and poor were dependent on the emergency rooms of our crowded county hospitals for medical care. Worse yet, for rural and migrant workers as well as those confined to the inner city, even emergency room care often was nonexistent.

Virtually every American feared diseases such as cancer and multiple sclerosis because there was little hope for their cure. If someone were severely depressed or under stress because of pressures on the job or at home, his only alternative was the expensive services of a psychiatrist or a state mental institution.

The Committee and the Congress could not permit the basic health needs of so many Americans to go unserved. We enacted Medicare and Medicaid as well as other programs to increase the availability of health services and expand biomedical research.

Today, as Chairman of the Senate Committee on Labor and Human Resources, I am proud of the success and achievements of these landmark health care programs; they have improved the capacity of our Nation's health care system and have provided basic health care to millions of Americans.

However, as physicians, you are keenly aware that success has not been without a price. Most of the recent public debate regarding the ills of our health care delivery system has focused on costs which have given every appearance of being beyond the control of the public or private sector. Medical expenses in the United States rose from $12 billion in 1950 to over $190 billion in 1978. Over nine percent of the gross national product is now spent on medical care, a figure nearly double the percentage spent twenty-five years ago.

Because expenditures for health care have consumed a growing share of the Federal budget, 12.4 percent in 1977 versus 4.8 percent in 1965, it often is contended that government programs have spurred the sustained growth in health expenditures.

I do not share this viewpoint. I believe that our current problems are attributable to a variety of complex, interrelated factors: changes in the size and age of our population; inflation in the prices of medical services and goods; and increases in the quality and character of services and goods provided, including changes in patient utilization patterns.

The basic structure of the American health care delivery system has changed little over the past several years. In the 1930's and 1940's, when private health insurance covered mainly hospitalization, the utilization of hospital services increased. When coverage was extended to surgical procedures, the number of procedures increased. In the '60's and early '70's, the public and private sectors channeled monies and health manpower resources into high-cost, specialized technical care, ignoring routine preventive services and other forms of care related to the early diagnosis and treatment of illness.

In retrospect, it would seem as if the government was quick to respond when it found a critical gap in our national health care system. However, the government and the health care industry may have filled many of the needs of the underserved and disadvantaged without a truly national focus. With our experience, resources, and manpower, the United States now should provide a national system of health care for all Americans.

Last November, I chaired Committee hearings in Newark because I wanted to know more about the specific effects that national health insurance, particularly Senator Kennedy's Health Care for All Americans Act (S. 1720), might have on New Jersey health care problems. I left that hearing convinced that even in times of fiscal restraint, national health insurance is a commodity we cannot afford to be without.

An overwhelming amount of the testimony focused on the unfortunate reality that access to quality health care in New Jersey is related directly to the financial status of the individual seeking care. In the inner cities and some rural areas in New Jersey, as many as ten percent of those in the hospital and perhaps 50 percent of those requiring other kinds of necessary medical services have no insurance and few resources to pay for health care. Over 36 percent of those living below the poverty line cannot qualify for Medicaid and must attempt to pay for some form of medical insurance.

I believe that the Health Care for All Americans Act addresses the dual goal of controlling health care costs and expanding benefits for those truly in need. S. 1720 is most

*United States Senator; Chairman, Committee on Labor and Human Resources. He may be addressed at Room 352, Russell Senate Office Building, Washington, D.C. 20510.

worthy of your consideration as physicians who understand that high-quality health care is vital to the well-being of our communities. Perhaps most encouraging, this legislation preserves the most positive elements of the existing structure of the health care delivery system while changing those which must be changed.

The bill is vastly different from those developed in previous years by Senator Kennedy and the Committee for National Health Insurance, a fact which I have found to be little understood or appreciated.

The bill utilizes private insurers to administer the program thereby minimizing government involvement. It gives providers the freedom of choice of practice mode.

The Kennedy bill substantially would change the structure of the fee-for-service physician reimbursement method now in existence. I can understand the skepticism with which you may view these changes but I see them as essential to the efficient functioning of the health care delivery system.

Payments for physicians' services currently account for 20 percent of national health expenditures. In addition, physicians influence the use of many other services. For these reasons, selecting a method of reimbursing physicians is one of the most important choices policymakers will face in designing a national health insurance program.

Under the provisions of the Kennedy bill, physicians would be reimbursed on a fee-for-service basis but at levels negotiated between physicians and a national health board. In order to assure fair reimbursement levels, a national relative value scale would be developed to serve as a guideline. Criteria for the scale would include time and effort, difficulty of the procedure, costs to providers and variations in the costs of practice. Perhaps the most beneficial aspect of the bill to physicians would be a major reduction in the paperwork required of doctors prior to receiving third party payments.

The HCFAA will need the refinements of a thorough review by the legislative process. Because the bill is expensive and the Nation's economic situation is uncertain, we may need to delay benefits other than catastrophic illnesses, the elderly and children.

Once our Nation's inflation rate is curbed and the cost benefits of an improved health care system are apparent, the country can look forward to the full range of benefits from national health insurance. As the technical issues come before the Congress, I will be working with New Jersey physicians and others in the health industry so that the system and structure we create will treat all Americans fairly and equally at a cost we all can afford.

214th Annual Meeting
Medical Society of New Jersey
May 10-13, 1980

HOUSING APPLICATION

THE MEADOWLANDS HILTON

PLEASE RESERVE: ____ SINGLE ____ DOUBLE ____ TWIN ____ SUITE

ARRIVAL: (DATE) _____ AT (TIME) _____

DEPARTURE: (DATE) _____ AT (TIME) _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

IF DOUBLE OR TWIN, NAME OF PERSON JOINING _____

Singles: $50
Doubles: $60

Executive Singles: $75
Executive Doubles: $95
Suites: $150 and up

If range of rates is offered and rate requested is not available, the next available rate will be assigned. Reservations must be received not later than two (2) weeks prior to the opening date of your meeting and will be held until 6 p.m. on day of arrival unless otherwise specified.

(New Jersey Sales Tax—5%)

Complete and mail this application directly to:

Front Office Manager
The Meadowlands Hilton
Two Harmon Plaza
Secaucus, New Jersey 07094

Confirmation will be received directly from the hotel.

A limited number of rooms also will be available at the following hotels.

For information call directly:

Saddle Brook Marriott Hotel	201-843-9500
Holiday Inn, North Bergen	201-348-3600
Holiday Inn, Lyndhurst	201-933-9800

214th Annual Meeting

May 10-13

Meadowlands Hilton Hotel—Secaucus

(See housing application—p. 209, this issue)

DAILY SCHEDULE

Friday, May 9, 1980
3:30 p.m.—Board of Trustees

Saturday, May 10, 1980
8:00 a.m.—Registration Opens
9:00 a.m.—Message Center Opens
9:00 a.m.—Rule 4:21 Panel Session
11:30 a.m.—Meeting—NJ Committee on Trauma
12:00 noon—Exhibits and Coffee Lounge Open
12:00 noon—Luncheon—NJ Committee on Trauma
1:00 p.m.—Annual Spencer T. Snedecor Trauma Oration
2:00 p.m.—House of Delegates
3:30 p.m.—Reference Committee Meetings:
"A", "B", "D", "G", Constitution & Bylaws

Sunday, May 11, 1980
7:30 a.m.—Scientific Session on Dermatology
8:00 a.m.—Registration Opens
8:30 a.m.—Scientific Session on Oncology
9:00 a.m.—Message Center, Exhibits and Coffee Lounge Open
9:00 a.m.—Scientific Sessions:
Allergy, Otolaryngology
Emergency Medicine
Neurosurgery and Neurology
Ophthalmology
Psychiatry, Family Practice
10:00 a.m.—Reference Committee Meetings:
"C", "E", "F", "H"
12:00 noon—Luncheon—NJ Dermatologic Society
1:00 p.m.—Scientific Sessions:
Anesthesiology
Cardiovascular Diseases
Nuclear Medicine
Obstetrics and Gynecology
Plastic and Reconstructive Surgery
3:00 p.m.—House of Delegates
4:30 p.m.—Widows and Orphans Society
6:30 p.m.—Inaugural Reception Honoring President-Elect and Mrs. Baker
Hosts—MSNJ and Morris County Medical Society
All members, official guests, and their wives, and Auxiliary members are cordially invited
—Tickets $5 per person
8:00 p.m.—Inaugural Dinner
Hosts—MSNJ and Morris County Medical Society
Music and Dancing—Phil Bennett and his Orchestra—Tickets $35 per person

Monday, May 12, 1980
7:00 a.m.—JEMPAC Breakfast
8:00 a.m.—Registration Opens
9:00 a.m.—Message Center, Exhibits and Coffee Lounge Open
9:00 a.m.—Scientific Sessions:
Chest Diseases, Pediatrics
Family Practice, Medicine, Radiology, Urology
Orthopaedic Surgery, Rheumatism
Surgery, Clinical Pathology
NJ Foundation for Health Care Evaluation
12:00 noon—Luncheon—NJ Orthopaedic Society
1:00 p.m.—Scientific Sessions:
Gastroenterology and Proctology
Physical Medicine and Rehabilitation
3:00 p.m.—House of Delegates
3:00 p.m.—Exhibits and Coffee Lounge Close
5:00 p.m.—Message Center Closes
6:00 p.m.—JEMPAC Wine and Cheese Reception

Tuesday, May 13, 1980
7:15 a.m.—Breakfast-Meeting of the Coalition of Southern NJ County Medical Societies
Breakfast-Meeting of the Essex County Medical Society
7:30 a.m.—Breakfast-Meeting of the Bergen County Medical Society
8:30 a.m.—Registration Opens
9:00 a.m.—House of Delegates
12:00 noon—Registration Closes
2:00 p.m.—Annual Meeting—Board of Governors of MIIE
3:00 p.m.—Board of Trustees' Meeting

DOCTORS' NOTEBOOK

Trustees' Minutes January 20, 1980

A regular meeting of the Board of Trustees was held on Sunday, January 20, 1980 at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

AMA State Health Legislation Meeting . . . Received a report from President Alessi on his attendance at the Sixth AMA State Health Legislation Meeting held in Phoenix, Arizona, January 3 to 6, which highlighted the following:

1. Future health legislation will be at the state level rather than federal, and state societies are urged to become actively involved in proposing good health legislation and to coordinate their activities with state specialty societies. The Chairman of MSNJ's Council on Legislation, who also attended the meeting, will prepare a list of state legislation involving the practice of medicine that has been enacted or is on the agenda in various states.

2. Since the importation of hard drugs has diminished considerably, the drug problem has extended to pharmacies and physicians' offices, and physicians are being subjected to greater regulation and scrutiny. The AMA is concerned that this increase in control has resulted in restrictions on legitimate prescriptions. The Medical Society must continue to monitor activities of the regulatory agencies and to have input into those which affect the practice of medicine.

3. A three-year approval survey is to be conducted to determine if the Health Systems Agency is an appropriate entity.

4. Several Congressmen have indicated that no health insurance legislation will be enacted this year.

5. Publication of a regulation requiring a certificate of need for equipment to be used for "in-hospital" patients cared for in a physician's office is being withheld pending consideration of the definition of "in-hospital."

6. There is a possibility that Congress will act on legislation to restrict the Federal Trade Commission in the regulation of professions. (It was suggested that members of MSNJ who have rapport with Senator Bradley contact him regarding this legislation.)

Specialty Societies . . . Received a report from President Alessi which proposed the following program to promote better liaison between specialty societies and the Medical Society of New Jersey:

1. Visitation by Medical Society officers to specialty society meetings. Request invitations.

2. Offering of administrative services to societies:

(a) Offer permanent address and administrative services at MSNJ headquarters

(b) Use of mailing services, at cost (existing policy)

(c) Billing for any services rendered at cost (existing policy)

(d) Continuation of support of specialty society educational programs at Annual Meeting

(e) Establishment of placement service (available through MSNJ Public Affairs staff)

(f) Provision of specialty society committee to establish policy and liaison consolidation

(g) Notification of Committee on Revision of Constitution and Bylaws to consider giving each specialty society a seat in the House of Delegates (already in process)

(h) Establishment of criteria for designation of specialty society recognition (existing policy)

(i) State Society lobbyist available to specialty society (coordinated through the Council on Legislation)

(j) Incorporation of specialty society auxiliary into keyman legislation program and reevaluation and revitalization of program.

Note: Dr. Todd called attention to the fact that presidents and presidents-elect of the specialty societies are invited to attend meetings of the Board of Trustees and have an opportunity for direct input. He recommended that a communication be sent to the specialty societies to make them aware of the cooperation that is offered, and the present concern for improving relationships; and recommended that the relation of specialty societies to MSNJ be included as an item for consideration at the Spring Conference of Presidents and Presidents-Elect.

Individual Reports of Members of the Board . . . Received a suggestion from Dr. Alessi that some consideration be given to having individual Board members submit reports to the Board on their contacts with their respective districts during the year.

Emergency Medical Services Task Force Reports . . . Noted that the New Jersey State Department of Health has distributed Emergency Medical Services Task Force Reports in booklet form titled as follows:

Program Guide—Volume I
Emergency Medical Services
Trauma
Emergency Department Standards
Behavior Task Force Report
Burn Task Force Report
Coronary Task Force Report
Perinatal Task Force Report—Volume I
Perinatal Task Force Report—Volume II
Emergency Response Plan

The Committee on Emergency Medical Care members will evaluate the reports. Copies are available from the Executive Offices. The New Jersey Hospital Association and the College of Medicine and Dentistry of New Jersey also are reviewing these reports and have agreed to a cooperative exchange of comments and opinions.

1979 Membership Status . . . Noted that as of December 31, 1979 there were 8,648 regular members, 84 affiliates, and 581 emeritus; there were 5,636 members of the AMA from New Jersey. It was suggested that the feasibility of MSNJ financially supporting AMA membership dues for interns, residents, and medical students in New Jersey (approximately 1,000) be considered by the

Membership Committee. Inclusion of these individuals would increase the population for determination of New Jersey's AMA delegate representation. Since the Ad Hoc Committee on Membership and Dues Collection had completed its assignment, it was suggested that the financial implications of assuming such payment of AMA dues be researched by the staff and their findings included as an addendum to the Committee's report.

1980 Dues Collection . . . As of January 18, dues had been received from 15 counties, accounting for 3,769 members. Atlantic, Cumberland, Hudson, Hunterdon, Sussex, and Warren have not reported any 1980 memberships.

CME Delinquents . . . Noted that in conformity with the policy adopted by the House of Delegates, following an 18-month grace period, 32 members of the Medical Society of New Jersey have been dropped for failure to meet CME requirements.

Physician Telephone Listings . . . Agreed that the question of whether listing as a "plastic surgeon" in the yellow pages of the New Jersey telephone directory should be limited to those who are board eligible or board certified should be referred to the State Board of Medical Examiners for a determination.

Note: The above action was in response to a communication from the New Jersey Society of Plastic and Reconstructive Surgeons, suggesting that only those physicians who are board certified or board eligible in that specialty should be listed as "plastic surgeons."

DRG—Medical Staff Education . . . Concurred with a suggestion that the State Department of Health be asked to participate in structuring the program to be conducted by the Medical Society of New Jersey and the New Jersey Hospital Association to educate physicians in New Jersey hospitals on the aspects and implications of the DRG system, to be initiated in 26 hospitals in New Jersey.

Hospital Medical Staff Bylaw Requirement . . . Received a statement from Mr. Maressa reiterating his position that requiring membership in a professional society is a reasonable criterion for admission to a hospital medical staff. To illustrate the involvement of an outside entity in hospital medical staff requirements, many hospitals require attending physicians to be board certified or board eligible, and involvement in an assignment of only members of a professional society is borne out by the use of members of MSNJ on the Supreme Court professional liability subpanels. The significant point with respect to the legality of a bylaw requirement is that the court will, in all likelihood, honor a regulation that applies the "rule of reason," and if fairness and due process have been afforded.

New Jersey Hospital Association . . . Noted that a report from NJHA on the Diagnostic Related Group Project will be forthcoming and that copies of correspondence between DHEW and New Jersey's Department of Human Services concerning a request for waivers of provisions of Title XIX of the Social Security Act (and the implementing regulations thereof), which has been approved under the authority of Section 402 of the Social Security amendments of 1967, as amended by Section 222 (b) of Public Law 92-603, will be supplied to MSNJ.

MSNJ Student Association . . . Received a report from the MSNJ Student Association which noted that the MSNJSA-sponsored Medical Practice Conversation Series has been well received; that Mr. Bielory has been authorized to attend, with expenses paid, the 1980 AMA National Leadership Conference in Chicago, February 21-24; that MSNJ will underwrite the cost of tickets for outgoing and incoming officers of MSNJSA to attend the Inaugural Reception and Dinner during the 1980 Annual Meeting; and that accommodations again will be made to seat the officers of MSNJSA in the House of Delegates.

Ad Hoc Committee on Degree Designation . . . Received the following statement concerning problems involved in degree designations:

1. *Basic Problems*

D.O.s skilled in the practice of manipulative therapy wish the public to be aware that they are so trained. Doctors of Osteopathy who no longer use manipulative therapy in their specialty practices, many of whom have been trained in allopathic hospitals, find themselves embarrassed by patients seeking manipulative therapy when they are no longer skilled in this form of therapy.

Doctors of Osteopathy are fully trained in the practice of medicine whereas limited practitioners are not so trained.

M.D.s are increasingly aware of the appropriate uses of bio-mechanics and manipulative therapy in treatment, as is the public. However, the public is usually poorly informed in regard to the exact role of limited practitioners in medical treatment.

2. *Basic Facts*

1. There is growing understanding between the Medical Society of New Jersey and the Osteopathic Association of their mutual interest and management of patients.

2. Licensure of both groups is identical in the State of New Jersey.

3. There is general acceptance by the public and hospital staffs that the two groups are fellow practitioners.

4. An increasing number of students at the CMDNJ-Rutgers Medical School are interested in the programs of bio-mechanics given by the D.O. section of that school.

5. Many of our medical colleagues have utilized the services of our D.O. colleagues in the practice of manipulative therapy.

6. Personal relations between doctors of osteopathy and allopaths has never been on a more fraternal level than at present.

7. Few now remember the similar problem which existed between the homeopaths and allopaths sixty years ago, nor how it came to be solved.

8. Allopaths and osteopaths face the same problems on hospital staffs regarding the status of limited practitioners.

9. Doctors of osteopathy who are skilled in body mechanics wish to have this brought to public attention.

10. FTC rules may make it imperative to make this information available to the public.

11. Allopaths and osteopaths stand as the only fully licensed practitioners of medicine at the present time. The use of the term M.D. has now become a generic term and is in many instances unrelated to the granting of an academic degree.

12. The granting of a specific degree in New Jersey, while by charter awarded to the Medical Society of New Jersey, is also permitted to be granted by the CMDNJ and cannot be granted by the State Board of Medical Examiners.

. . . Took the actions indicated on the following proposals:

a. That the present equal license to practice medicine and surgery include the right to use the generic title of M.D.

Postponed indefinitely.

b. That those skilled in the practice of manipulative therapy be allowed to use the terms D.O., D.O.-M.D. or M.D.-D.O. in stationery, activities, correspondence, telephone listings and advertising pursuant to FTC regulations.

Postponed indefinitely.

c. That a new conference be called with the representatives of the New Jersey Association of Osteopathic Physicians and Surgeons, the State Board of Medical Examiners, *the Department of Higher Education, the College of Medicine and Dentistry of New Jersey,* and the Medical Society of New Jersey to consider this matter. (Italics indicate Board amendment.)

Accepted.

Division of Medical Assistance . . . Referred the following resolution from the Committee on Medicaid to the Executive Committee and Legal Counsel for consideration:

Whereas, the Division of Medical Assistance and Health Services of New Jersey has an investigative branch which is empowered to review the files of providers and interview patients of same concerning services rendered; and

Whereas, these reviews and interviews should be done in a civil tone and not a criminal one; and

Whereas, many of those reviewing and interviewing have been abusive, contemptuous, disturbing, hostile, intimidating and encroaching on the civil rights of providers and patients; now therefore be it

RESOLVED, that the Medical Society of New Jersey through counsel inform the Division of its dissatisfaction and disapproval of the present system used by the investigative branch and ask that such practice cease immediately; and be it further

RESOLVED, that the Medical Society of New Jersey through counsel strongly suggest that the Division establish guidelines and boundaries for those who are assigned to investigate and that said rules have Medical Society of New Jersey concurrence prior to enactment.

Conflict of Interest Statement . . . Noted that the action taken by the Board of Trustees on November 11, 1979 concerning conflict of interest is in conformity with the 1975 provision developed by the Judicial Council and is nothing more than a provision for a process to apply the previously adopted position on a more frequent basis.

Specialty Society Representation in MSNJ's House of Delegates . . . Noted that the New Jersey Orthopaedic Society had declined an invitation to appoint one of its members to be a spokesman for that Society in MSNJ's House of Delegates and urged the Board of Trustees to develop a proposal which would offer more meaningful participation by specialty societies at MSNJ's House of Delegates. It was noted that the Special Committee on Long Range Planning and Development already is considering reapportionment of the House of Delegates to include specialty societies.

CMDNJ Notes*

Stanley S. Bergen, Jr., M.D.
President

(Following is the second of a two-part article on "The Narrowing Gap Between Practicing and Academic Physicians," prepared by Richard C. Reynolds M.D., Dean of the CMDNJ-Rutgers Medical School)

Why do we speculate on the narrowing gap between academic and practicing physicians? When medical school faculty comprised only a small percent of all physicians it was easier for them to stand apart. Today there are 350,000 active physicians. Twenty-five years ago there were 8,000 full-time faculty in medical schools, none in New Jersey. Today there are 45,000, including more than 500 at CMDNJ's three medical schools.

In addition there are 60,000 interns and residents in training who are part of an educational program. This means that over 100,000 of the active physicians represent either full-time faculty or residents. Medical students, 60,000 in number (1,086 at CMDNJ), increase the academic constituency to 165,000. To these numbers there can be added 86,000 physicians who serve as part-time or volunteer faculty in the nation's 124 medical schools. CMDNJ alone employs some 1,860 part-time and volunteer faculty. Perhaps it comes as a surprise that more than one-half of all active physicians in this country have a defined relationship with a medical school.

Residency programs occur in major teaching hospitals owned or dominated by the medical school or in major affiliated hospitals. In 1965 there were 117 affiliated hospitals; today there are 725. (CMDNJ currently is affiliated with 51 hospitals.) Affiliated hospitals usually have a small cadre of full-time physicians responsible for the academic programs but they are served largely by practicing physicians who admit their patients to the affiliated hospital and many of whom participate in the teaching programs. These affiliated hospitals create environments which provoke and promote exchange between academic and practicing physicians.

In recent years there has been burgeoning activity in continuing medical education accentuated by specialty recertification requirements and state medical society requirements for membership. Formerly continuing medical education often represented a foray by an academic to a county medical society meeting or the return of a practitioner to the medical center for a brief course. Now there are many continuing medical education meetings using sophisticated educational technologies that are forcing a continuing dialogue between the two groups of physicians. Last year medical schools offered 60 percent more courses than the previous year and there was a 39 percent increase in physician registration.

Even the professional constituencies of both groups resemble one another. Both groups include a majority of specialists (85 percent of doctors in practice consider themselves specialists) although some of the more uncommon specialists are more likely to be found in academic medical centers.

Formerly, the financial plight of full-time academic physicians represented a distinct cleavage from practicing physicians. When I was in medical school, young physicians were counseled to pursue academic careers only if they had a separate source of income. Now, when one includes fringe benefits and retirement plans, the income of full-time medical school faculty has begun to approach the levels of average earned income of private practitioners.

In recent years there has been a change in the patient constituency of academic health centers. Medical schools from educational necessity are identifying and providing continuous and comprehensive care to population clusters much like their practitioner colleagues through reorganized outpatient clinics, HMO's, and ambulatory health centers. On the other hand, the influx of superbly trained specialists into practice has made it possible for many community hospitals to care for patients with unusual and complex problems that formerly would have been referred to the

university teaching hospital.

The most striking similarity between the two groups of physicians, however, is that both are beset by social and political forces external to the profession which are altering the education of physicians and the practice of physicians. When Medicare and Medicaid legislation was passed in 1965, the federal government and individual states became the largest purchasers of health care for citizens in this country. With the recognition in the early 60's of a physician shortage, the federal government gave large sums of money to medical schools in addition to the already abundant research support. This has brought both groups of physicians under increasing legislative and executive scrutiny at federal and state levels. With rising costs of health care and medical education occurring during a time of economic uncertainty, academic and practicing physicians are being made more accountable for their actions. Practitioners' fees, medical school budgets, hospital expansion are routinely reviewed by a multiplicity of individuals and agencies, the majority of whom are not representatives of any health profession.

The ability to practice medicine is a privilege granted by our society to those who have studied and trained for this purpose. Medical schools are institutions created by society to accomplish the selection, education, and training of physicians. For several decades the authority of both the practitioners and educators was rarely challenged. Interestingly enough, as both groups give substantial evidence of improving performance, societal expectations have changed, resulting in a public murmur of dissatisfaction. This present public displeasure with professions is not, of course, limited to medicine.

One theme remains clear. The practice of medicine and the education of physicians will continue to change and both practitioners and academicians will continue to be buffeted by a myriad of political and social forces. It is important that both groups of physicians try to preserve those traditions of practice and education necessary to fulfill their public mission as at the same time they recognize and incorporate those changes directed at costs, quality, access, and character of medical care that the public expects and seeks. To avoid drastic, precipitous and unwise change, it is imperative that members of the medical profession at least appear to be responsive. Fortunately, both groups of physicians by nature of the changes of the last 25 years have come closer to a rapprochement than ever before. They are beginning to understand one another's problems, but also to recognize common problems. Perhaps one advantage of this narrowing gap between academic and community physicians is that they will be able to work together to solve these problems.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

The House of Delegates of MSNJ, held a special session on November 18, 1979. The report of the Task Force on the IPA Project was considered at that meeting and the House adopted the following recommendations of the Task Force:

- That MSNJ provide educational services to physicians on status and future of prepaid health care programs.
- That MSNJ assist in the formation of a voluntary organization of IPAs.
- That MSNJ continue to study the progress of existing HMOs, consult with experts on prepaid health care, and be aware of efforts of government, industry and labor in this regard.
- That the performance and effectiveness of operating HMOs in New Jersey be the subject of continuing study and scrutiny.
- That the quality of care of HMOs should be examined in order to protect the HMO subscriber and the professional integrity of IPA member/physicians.
- That the need for legal and/or administrative assistance to IPA member physicians should be discussed and evaluated, to determine if this service could be provided through an association of IPAs or some other source.

Your Foundation is gratified at the attitude of the House on this thorny subject. We have been providing many of the services recommended. Our Council on Alternate Delivery Systems provides a forum for consideration of prepayment systems.

HEW has announced HMO development strategy for the next decade. The plans call for doubling the current number of HMOs and tripling the enrollment in prepaid plans. Primary targets are metropolitan areas having more than 250,000 people. This includes the New York City-New Jersey region, the Philadelphia-New Jersey area, and Newark and its environs. These locales are based on standard metropolitan statistical areas (SMSAS), and are included in the top priority list of twenty areas.

In New Jersey, activity continues on many levels. Group Health Plan, in Hudson County, and Central Essex Health Plan have closed. In the case of Group Health Plan, the Health Insurance Plan (HIP) of New Jersey, has applied for permission to take over operations of GHP. Approval is expected shortly. HIP of New Jersey is affiliated with HIP of New York. Many persons who work in New York City reside in nearby New Jersey, which explains HIP's interest. Crossroads Health Plan, of Essex County, is planning to expand into Burlington and Ocean Counties, at the urging of physicians in those areas. CoMED HMO, of Morris County, has requested approval to extend its service area into Middlesex and Piscataway townships. This will create some overlap between CoMED and Mid-State Health Plan (both IPAs) and the Rutgers Community Health Plan. A competitive atmosphere is being created; not only between prepaid health plans and the traditional fee-for-service arrangements, but between the plans themselves. Such competition may be desirable from a marketing standpoint, but the hope here is that the IPA groups will not suffer because of it. The news of the withdrawal of physicians from the IPA in Fort Collins, Colorado (Choice Care, Inc.) has attracted much attention. Choice Care was one of the largest IPAs in the nation (and that may have been part of the problem). Size and conflict in areas need not be detrimental, however. Seven plans have existed in the Minneapolis-St. Paul complex with improved efficiency. The business management aspects of a closed panel or IPA cannot be ignored. Physicians who consider participating should realize that there will be some changes required in how they practice. Business as usual under a new title will not succeed.

There have been several questions on the relationships between primary care physicians and consultants in an IPA. One of the reasons for prepaid plans is to increase emphasis on primary care. Benefits are paid for ambulatory primary care which are not available in the usual indemnity plan (the Pioneer program of New Jersey Blue Cross and Blue Shield is aimed at improving such benefits). Referrals to consultants are usually

arranged by the primary doctors. Each plan has established procedures on elective use of "secondary" specialists.

There are many questions on prepaid programs. Problems will arise on all sides of the issue. NJFHCE agrees with the House of Delegates for continuing education and review of developments in our State and elsewhere in the nation, and we are available to help in this effort.

ACCP Fellows

The following members of the Medical Society of New Jersey were awarded Fellowship status in the American College of Chest Physicians during convocation ceremonies on November 7th, 1979, on the occasion of the 45th Annual Scientific Assembly of the American College of Chest Physicians:

Donald Auerbach, M.D., Cherry Hill
William M. Burke, M.D., Millburn
James U. Cardelia, M.D., Camden
James L. Hughes, III, M.D., Camden
Joseph E. Scerbo, M.D., North Bergen
Stuart L. Silberstein, M.D., Englewood

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Prasad Srinivasan, M.D., 2951 S. King Drive, Apt. 1808, Chicago, IL 60616. Baroda (India) 1973. Subspecialty, pediatrics. Board certified (pediatrics). Group. Available July 1980.

ANESTHESIOLOGY—Mukesh N. Gatha, M.D., 1935 Eastchester Road, Apt. 22-D, Bronx, NY 10461. B. J. Medical (India) 1972. Board eligible. Group, partnership. Available July 1980.

Mohammed Mushtaque, M.D., 183-11 Hillside Ave., Apt. 11-K, Jamaica, NY 11432. Dow (Pakistan) 1975. Board eligible. Group, solo, or institutional. Available July 1980.

CARDIOLOGY—Shou-Li Hong, M.D., 7400 Haverford Avenue, Apt. E-113, Philadelphia, PA 19151. Taipei (Taiwan) 1970. Also, general internal medicine. Board certified (IM). Partnership, group, solo. Available July 1980.

H.G. Yekanath, M.R.C.P. (UK), 10 Overlook Road, Apt. 4-G, Summit 07901. Mysore (India) 1965. Also general internal medicine. Single or multi-speciality group, institutional. Available July 1980.

DERMATOLOGY—Seymour Rand, M.D., Case-Western Reserve University Hospital, 2065 Adelbert Road, Box 352, Cleveland, OH 44106. Medical College of Virginia 1975. Solo, partnership. Available July 1980.

ENDOCRINOLOGY—Henry G. Fein, M.D., 2008 Baltimore Road, Apt. E-41, Rockville, MD 20851. Columbia 1975. Also, general internal medicine. Board certified (IM). Single or multi-specialty group, partnership, insititutional. Available July 1980.

GASTROENTEROLOGY—Michael F. Fina, M.D., 134 North Street, Apt. 7, Newtonville, MA 02160. New York Medical College 1975. Also, general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

GENERAL PRACTICE—Gregory A. Pistone, M.D., 2018 W. High Street, Haddon Heights 08035. Pennsylvania State 1979. Board eligible. Student health/adolescent medicine, pharmaceutical, ER, house physician. Available July 1980.

HEMATOLOGY/ONCOLOGY—K. K. Aggarwal, M.D., 1525 Milersport Highway, Apt. 304, Williamsville, NY 14221. Delhi (India) 1969 Board certified. Solo, insitutional. Available July 1980.

P. S. Bala, M.D., 882-6 Clifton Court Circle, NE, Atlanta, GA 30329. Calicut (India) 1965. Board eligible. Any type practice. Available July 1980.

INTERNAL MEDICINE—Kandathil M. Mathew, M.D., 22 Woodland Park, Hartford, CT 06105. Kasturba (India) 1969. Subspeciality, cardiology. Board certified. Partnership or institutional. Available July 1980.

Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, cardiovascular diseases. Board certified. Group or partnership. Available July 1980.

Omprakash B. Ramani, M.D., 61-15 98th Street, Apt. 17-F, Rego Park, New York 11374. B. J. Medical (India) 1973. Board certified. Group or partnership. Available July 1980.

Stuart R. Schlanger, M.D., 105 North 31st Avenue, Omaha, NE 68131. Washington University 1977. Special interest, emergency medicine. Board eligible. Group or partnership. Available July 1980.

Richard Plotzker, M.D., 79 Holbrook Road, North Quincy, MA 02171. St. Louis University. Board eligible. Group, clinic, institutional, or industrial. Available July 1980.

NEPHROLOGY—Vincent A. Graziano, M.D., 445 East 68th Street, Apt. 4-B, New York, NY 10021. Georgetown 1975. Also general internal medicine. Board certified (IM). Solo, group, or partnership. Available July 1980.

NEUROLOGY—Ramanand C. Dandillaya, M.D., 16 Harper Terrace, Cedar Grove 07009. Osmania Medical 1963. Board eligible. Group, partnership, solo. Available July 1980.

Bong W. Chang, M.D., 1350 W. Bethune Avenue, Apt. 1209, Detroit, MI 48202. Seoul (Korea) 1972. Board eligible. Group or solo. Available April 1980.

NUCLEAR MEDICINE—Philip A. Bardfeld, M.D., 160 West End Avenue, Apt. 8-E, New York, NY 10023. SUNY-Downstate 1961. Board certified. Single or multi-specialty group, institutional. Available.

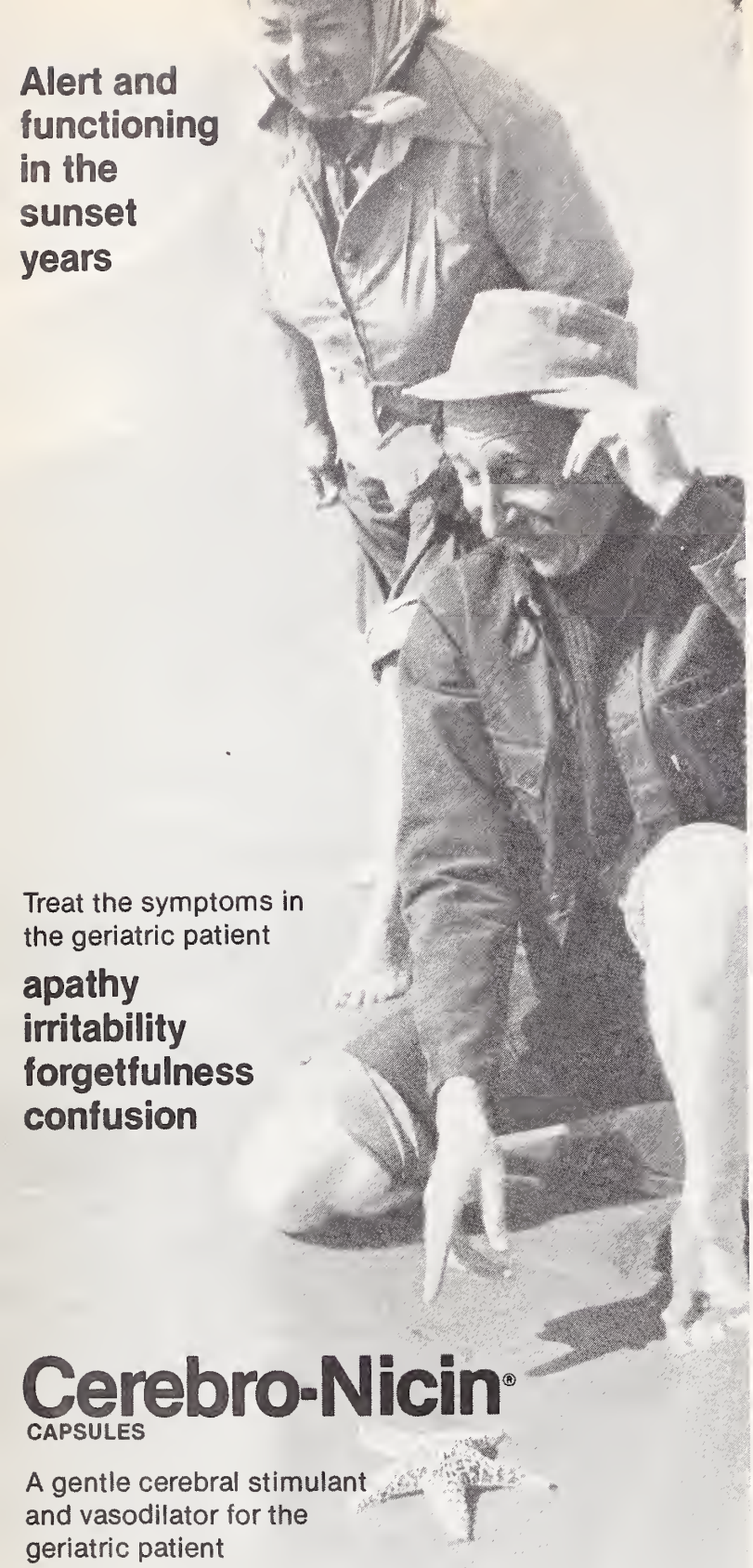
OBSTETRICS/GYNECOLOGY—Robert L. Daniels, M.D., 60 Haven Avenue, Apt. 9-E, New York, NY 10032. Columbia. Board eligible. Group or partnership. Available July 1980.

Jeffrey M. Good, M.D., Mt. Sinai Medical Center, Milwaukee, WI 53201. University of Barcelona (Spain) 1975. Board eligible. Single or multi-specialty group. Available August 1980.

Lemuel G. Villanueva, M.D., 173 Lionhead Court, Baltimore, MD 21237. University of East (Philippines) 1974. Board eligible. Solo, group, HMO associate, hospital-based. Available July 1980.

Mina M. Chudgar, M.D., 15427 Jester Avenue, Baton Rouge, LA 70816. B.J. Medical College (India) 1972. Board eligible. Group, partnership. Available July 1980.

Mohammad Imtiaz Ahmad, M.D., 677 Central Avenue, Barboursville, WV 25504. Pakistan 1970. Board eligible. Solo with coverage when needed, small town. Available.



Alert and functioning in the sunset years

Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:

Pentylenetetrazole	100 mg.
Nicotinic Acid	100 mg.
Ascorbic Acid	100 mg.
Thiamine HCL	25 mg.
l-Glutamic Acid	50 mg.
Niacinamide	5 mg.
Riboflavin	2 mg.
Pyridoxine HCL	3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

OPHTHALMOLOGY—Ronald A. Serniuk, M.D., 502 Thompson Avenue, Roselle 07203. Georgetown 1971. Board eligible. Partnership or solo. Available.

PATHOLOGY—Arthur R. Copeland, M.D., 826 Goler House Rochester, NY 14620. Albany 1976. Both AP/CP. Board eligible. Group. Available July 1980.

Uma Raghavan, M.D., Dept. of Pathology, Norwalk Hospital, Norwalk, CT 06850. Delhi (India) 1973. Both AP/CP. Board certified. Group. Available.

PSYCHIATRY—Charles Goldfarb, M.D., 121 Deerhaven Road, Mahwah 07430. Buffalo 1956. Board certified. Partnership in single or multi-specialty group. Available July 1980.

RADIOLOGY—Stephen J. Fischer, M.D., 145 East 15th Street, Apt. 12-U, New York, NY 10003. Wisconsin 1975. Special interest/diagnostic radiology. Board certified. Group, hospital. Available.

S. David Bogart, M.D., 79-39 210th Street, Bayside, NY 11364. Special interest, diagnostic radiology. Board certified. Group, hospital-based group. Available.

SURGERY, GENERAL—B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.

Mohan Lal Sarwal, M.D., 42-52 Union Street, Apt. 117, Flushing, NY 11355. Govt. Medical, Patiala-Punjab (India) 1968. Group, partnership, solo. Available.

Mohammand A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liaquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roc Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Bethune Av., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

SURGERY, NEUROLOGICAL—Syed J. Shahid, M.D., 157 Corbin Place, Brooklyn, NY 11235. Dow Medical (Pakistan) 1972. Single or multi-specialty group, solo. Available.

SURGERY, ORTHOPEDIC—William Stratford, M.D., 16 Bennett Village Terrace, Buffalo, NY 14214. SUNY-Buffalo 1975. Solo, partnership, single-specialty group. Available July 1980.

Lewis Preschel, M.D., 104-40 Queens Boulevard, Forest Hills, NY 11375. SUNY-Downstate 1975. Board eligible. Partnership. Available July 1980.

SURGERY, PLASTIC—Donald F. Clukies, M.D., 681 Richardson Road, Rochester, NY 14623. Upstate (Syracuse, NY) 1973. Special interest, head and neck surgery. Board eligible (general surgery). Partnership, single or multi-specialty group. Available July 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

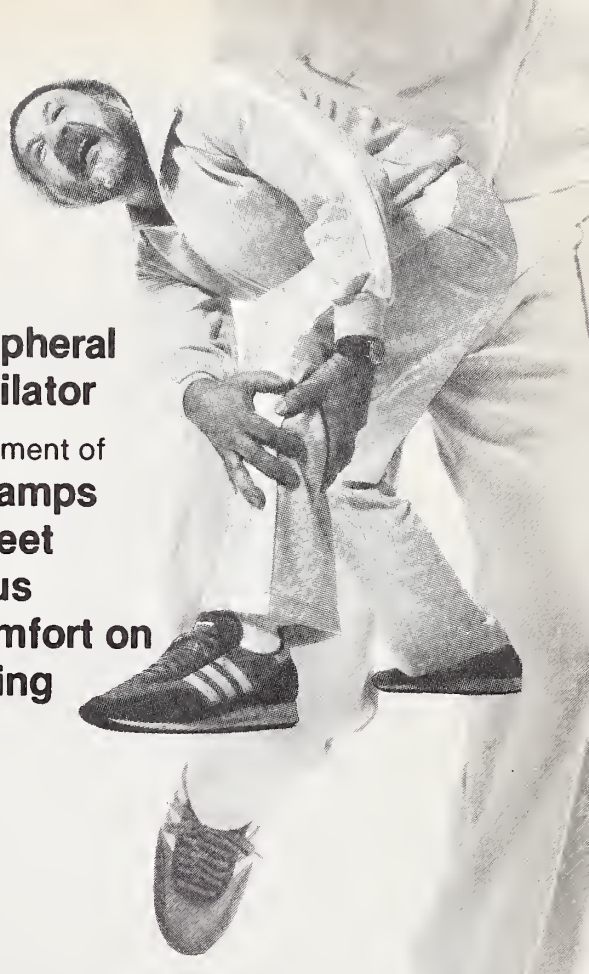
Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Sidney Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available June 1980.

UROLOGY—G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

Eliahu Koren, M.D., 5700 Arlington Avenue, Apt. 6-J, Riverdale, NY 10471. Jerusalem 1968. Board eligible. Group, partnership, solo. Available July 1980.



A peripheral vasodilator

for treatment of
leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's
comfort/convenience
in choice of
3 strengths

Gradual Release
LIPO-NICIN®/300 mg.
Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release
LIPO-NICIN®/250 mg.
Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.
Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Report of the Nominating Committee

Offices To Be Filled by Election—1980 Annual Meeting

Charles S. Krueger, M.D., Chairman

Office	Term	Nominee and County
President-Elect	1 year	Armando F. Goracci, M.D., Gloucester
1st Vice-President	1 year	Howard D. Slobodien, M.D., Middlesex
2nd Vice-President	1 year	Alexander D. Kovacs, M.D., Union
Secretary	3 years	Arthur Bernstein, M.D., Essex
Treasurer	3 years	Rudolph C. Gering, M.D., Mercer
Trustees:		
1st District	3 years	Frank Y. Watson, M.D., Essex
2nd District	3 years	Ralph J. Fioretti, M.D., Bergen
5th District	3 years	Sherman Garrison, M.D., Cumberland
Judicial Councilor:		
2nd District	3 years	Robert A. Weinstein, M.D., Sussex
5th District	3 years	Ronald M. Fisher, M.D., Cumberland
AMA Delegates:		
	1 year	Myles C. Morrison, Jr., M.D., Morris
	2 years	Alfred A. Alessi, M.D., Bergen
	2 years	Frederick W. Durham, M.D., Camden
	2 years	Karl T. Franzoni, M.D., Mercer
	2 years	John S. Madara, M.D., Salem
	2 years	Henry J. Mineur, M.D., Union
AMA Alternate Delegates:		
	2 years	Palma E. Formica, M.D., Middlesex
	2 years	Charles S. Krueger, M.D., Burlington
	2 years	Carl A. Restivo, Sr., M.D., Hudson
Delegates and Alternate Delegates to Other States		
New York:		
Delegate	1 year	Albert F. Moriconi, M.D., Mercer
Alternate	1 year	F. Sterling Brown, M.D., Atlantic
Connecticut:		
Delegate	1 year	Edward M. Coe, M.D., Union
Alternate	1 year	Gastone A. Milano, M.D., Atlantic
Administrative Councils:		
Legislation:		
1st District	3 years	Anthony P. Caggiano, Jr., M.D., Essex
4th District	3 years	Irving P. Ratner, M.D., Burlington
Medical Services:		
1st District	3 years	Richard H. Sharrett, M.D., Union
4th District	3 years	Charles O. Tyler, M.D., Camden
Mental Health:		
1st District	3 years	Alvin Friedland, M.D., Essex
2nd District	3 years	William H. Bristow, Jr., M.D., Bergen
Public Health:		
1st District	3 years	Edward M. Coe, M.D., Union
4th District	3 years	Watson E. Neiman, M.D., Burlington
Public Relations:		
1st District	3 years	Robert J. Lorello, M.D., Essex
4th District	3 years	Jesse Schulman, M.D., Ocean
Standing Committees:		
Annual Meeting	3 years	James H. Spillane, M.D., Warren
Auxiliary Advisory	3 years	George T. Hare, M.D., Camden
Finance and Budget	3 years	Charles S. Krueger, M.D., Burlington
Medical Defense and Insurance	3 years	Frank J. Malta, M.D., Ocean
Medical Education	3 years	Roberta G. Rubin, M.D., Passaic
Publication	3 years	Julio del Castillo, M.D., Mercer

LETTER TO THE JOURNAL

Computerized Tomography of the Head—An Ambulatory, Out-Patient Service

January 22, 1980

Dear Dr. Krosnick:

Computerized x-ray tomography of the head, anticipated by William W. Oldendorf, a clinical neurologist, and perfected by Godfrey Hounsfield of the Central Research Laboratories of FMI, Ltd., has transformed much of neurological diagnosis from inferential deduction to concrete perceptualization. Immediately upon clinical availability, the medical profession grasped the relevance of being able to look into the head without opening it.

Because the apparatus is costly, an assumption was made on the part of government and other third-party payers that doctors would buy the machines, overuse them, and add to the cost of medical care. The HSA limited the number of scanners to be assigned to each area. However, when a radiologist in private practice applied for a certificate of need and was turned down by the New Jersey Commissioner of Health, the Appellate Division of the Superior Court of New Jersey declared that the commissioner's decision was not justified under the law, "Marsh vs. Finley, 160 N.J. Super. 193."

The CT scanner for the head is fundamentally an out-patient diagnostic instrument. Properly used, it may eliminate many unnecessary hospital admissions and limit intracranial problems for hospital admission to those who need to be admitted. Most of the patient material requiring the test is ambulatory. The vast majority of the tests can be timed to suit the patient's needs. Most CT scanners are and will be set up in hospitals. However, the free standing CT scanner deserves recognition for the economy it offers in the elimination of hospital costs wherever competent physicians are willing to venture their own money to pay for the instrument.

(Signed) Ira S. Ross, M.D.

CME CALENDAR

ANESTHESIOLOGY

Apr.

9 **Anesthesia in Toxemia of Pregnancy**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

May

3 **Anesthesia for the Neonate**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

14 **Anesthesia for Patient with Ischemic Heart Disease and Recent MI**
7:30 p.m.—Helene Fuld Medical Center
(Helene Fuld Medical Center)

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

Apr.

1 **Medical Lecture Series**
7 9-10 a.m.—Holy Name Hospital,
15 Teaneck
22 *(Holy Name Hospital and AMNJ)*
29

2 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

2 **Medical Lecture Series**
16 1-3 p.m.—Christ Hospital, Jersey City
23 *(Christ Hospital and AMNJ)*

2 **Cardiac Diagnostic Procedures**
1-4:30 p.m.—Town and Campus Motor Inn, Pleasant Valley Way, West Orange
(Essex County Heart Association, Inc. Chapter, NJ Heart Association and AMNJ)

2 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

2 **Bronchial Asthma**
11:30 a.m.-1 p.m.—Rahway Hospital
(Rahway Hospital and AMNJ)

2 **Pancreatic and Biliary Tract Diagnoses**
1-5 p.m.—St. Elizabeth Hospital, Elizabeth
(St. Elizabeth Hospital and AMNJ)

2 **Endocrinology Conferences**

THE THIRD ANNUAL EDWARD G. WATERS GYNECOLOGIC CONFERENCE

Presented by the Department of Obstetrics and Gynecology of the New Jersey Medical School—CMDNJ at Resorts International Hotel, Atlantic City, New Jersey.

WORKSHOPS on April 10, 1980
GYNECOLOGY CONFERENCE on April 11-13, 1980

For further information, please contact Herik Caterini, M.D., Department of Obstetrics and Gynecology, New Jersey Medical School, 100 Bergen Street, Newark, New Jersey 07103. (201) 456-6480.

CONTINUING EDUCATION CREDITS:

	Workshops April 10	Conference April 11-13
AMA Credits Category I:	5	20
ACOG Cognates:	5	17
AAFP Prescribed Credits:	5	17
AOA Credits Category 2-D:	5	16
NJSNA Credit Hours:	5	20 (pending)

Chemotherapy Foundation Symposium IV

OPTIMUM STRATEGIES FOR CLINICAL CANCER CHEMOTHERAPY

October 22, 23, 24, 1980 New York City
Barbizon Plaza Hotel

Symposium Chairman:
Ezra M. Greenspan, M.D.

Presented by The Division of Medical Oncology, The Department of Neoplastic Diseases and The Page and William Black Post-Graduate School of Medicine of the Mount Sinai School of Medicine (CUNY).

Registration Fees: Physicians $200.
House Staff and Fellows $75.

This program meets criteria for AMA Category I credits.

For further information write:
The Director
The Page and William Black Post-Graduate School of Medicine
Mount Sinai School of Medicine
One Gustave L. Levy Place
New York, New York 10029
Telephone: (212) 650-6772

The University of Pennsylvania
School of Medicine
together with
The Philadelphia Veterans Administration Medical Center
present
"Nutrition Update—1980"

Fourth Annual Nutrition Symposium • April 9, 10 and 11, 1980
Dunlop Auditorium • Medical Education Building • 36th & Hamilton Walk • Philadelphia, PA 19104

This course will provide the practicing physician, pharmacist, nurse, clinical nutritionist or hospital administrator with a physiologically-based clinical approach to common diagnostic and therapeutic problems in clinical nutrition. Practical aspects of nutrition support with maximum audience participation will be emphasized for maximum educational benefit.

Course Director: James L. Mullen, M.D., Chief, Surgical Service, Philadelphia VA Medical Center; Director, Nutrition Support Service, Hospital of the University of Pennsylvania; Associate Professor of Surgery, University of Pennsylvania School of Medicine

"Nutrition Update—1980" Fourth Annual Nutrition Symposium April 9, 10, 11, 1980

Application Enrollment limited to 500

NAME _____

ADDRESS _____

Make Check payable to University of Pennsylvania

Mail application to:
School of Medicine/G-3
Office of Continuing Medical Education
University of Pennsylvania
Philadelphia, PA 19104

Registration Fee: $60.00

Please Check:
____M.D. ____R.D.
____R.N. ____R.Ph.
Other _____

Optional Friday Workshops (limit: 30 each) Please select:
____ Physicians' Workshop ____ Nurses' Workshop
____ Dietitians' Workshop ____ Pharmacists' Workshop

9 3:30-5 p.m.—Rotates between College
16 Hospital, Newark Beth Israel
23 Medical Center, Newark and VA
30 Medical Center, East Orange
(Endocrinology Section of AMNJ)

2 **Advances in Medicine**
9 9:30-11 a.m.—Bergen Pines County
16 Hospital
23 *(Bergen Pines County Hospital*
30 *and AMNJ)*

4 **Urology Grand Rounds**
3-5 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

4 **Renal Program Conferences in Nephrology**
2-3:15 p.m.—College Hospital, Newark
(Nephrology Section, AMNJ)

8 **The Skin and Infectious Diseases**
8-10 p.m.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

9 **Collagen Disease**
30 **Research on Cigarette Smoking**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

9 **New and Old Laboratory Methods**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

9 **Nutrition in Cancer**
16 **High Carbohydrate/High Fiber Diets for Diabetic and Hyperlipidemic Patients**
23 **Cutaneous and Oral Manifestations of Infectious Diseases**
30 **Common ENT Problems**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

12 **Hospital Management of Diabetic Patients**
19 **Management of Breast Cancer**
26 **Pneumonias**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

15 **Low Back Pain**
7 p.m.—Irvington General Hospital
(Irvington General Hospital and AMNJ)

15 **Diseases of the Pituitary**
12 noon—St. Mary's Hospital, Orange
(St. Mary's Hospital and AMNJ)

16 **William P. Burpeau Annual Award Dinner**
6 p.m.—The Manor, West Orange
(Urology Section, AMNJ)

16 **Antimicrobial Use in Pulmonary Infections**
11:30 a.m.-1 p.m.—VA Medical Center, East Orange
(VA Medical Center Pulmonary Disease Section and AMNJ)

17 **Inflammatory Bowel Disease**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

18 **Platelets, Prostaglandins, Lipids in Atherosclerosis**
8:30 a.m.-5:30 p.m.—Sheraton Center Hotel, New York City
(Rutgers Medical School and AMNJ)

18 **Collagen Disease**
12 noon—Freehold Area Hospital
(Freehold Area Hospital and AMNJ)

19 **Current Therapy Update: 1980**
8:30 a.m.-12:30 p.m.—Landmark Inn, Woodbridge
(Philippine American Medical Society of NJ and AMNJ)

21 **Thyroid Disease**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

22 **Surgical Intensive Care Monitoring**
8 p.m.—Warren Hospital, Phillipsburg
(Warren Hospital and AMNJ)

23 **Patients/Family/Physician—in Cancer**
12 noon-1:30 p.m.—Englewood Hospital
(Englewood Hospital and AMNJ)

23 **Management of Spasticity**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

23 **Anti-Inflammatory Agents in Interstitial Lung Disease**
11 a.m.-12 noon—Ciba-Geigy, 556 Morris Avenue, Summit
(Ciba-Geigy Pharmaceutical Div., and AMNJ)

23 **Summer Disorders**
8 a.m.-4:30 p.m.—Four Chefs Forum Inn, Cherry Hill
(CMDNJ)

24 **Visiting Professor Medical Grand Rounds**
12:30-1:30 p.m.—Mountainside Hospital Montclair
(Mountainside Hospital and AMNJ)

May

6 **Pulmonary Diseases**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

6 **Medical Lecture Series**
13 9-10 a.m.—Holy Name Hospital,
20 Teaneck
27 *(Holy Name Hospital and AMNJ)*

7 **Common Neonatal Problems**
11:30-1 p.m.—Rahway Hospital
(AMNJ)

7 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

7 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

7 **Therapy in Hypertension**
14 **Disorders of Salt and Water Balance**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

7 **Endocrinology Conferences**
14 3:30-5 p.m.—Rotates between College
21 Hospital, Newark Beth
28 Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

7 **Medical Lecture Series**
14 1-3 p.m.—Christ Hospital, Jersey City
21 *(Christ Hospital and AMNJ)*
28

7 **Advances in Medicine**
14 9:30-11 a.m.—Bergen Pines County
21 Hospital, Paramus
28 *(Bergen Pines County Hosp. and AMNJ)*

7 **Pituitary Tumors**
21 **Chronic Obstructive Pulmonary Disease**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medicol Center and AMNJ)

13 **Pathogenesis and Treatment of Acne**
8-10 p.m.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

19 **Unresolved Pneumonia**
12:30-1 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

20 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ NJ and AMNJ)

20 **Pericarditis**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

21 **Infections in the Compromised Host**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Joint Education Committees of Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

22 **Visiting Professor Medical Grand Rounds**
12:30-1:30 p.m.—Mountainside Hospital Montclair
(Mountainside Hospital and AMNJ)

NEUROLOGY/PSYCHIATRY

Apr.

1 **Seminar on Law and Psychiatry**
8 Rutgers Law School, 15 Washington St.,
15 Newark
22 *(Rutgers University Law School and*
29 *AMNJ)*

1 **Psychiatric Case Conferences**
8 7:30-9:30 a.m.—Trenton Psychiatric
15 Hospital, Trenton
22 *(Trenton Psychiatric Hospital and AMNJ)*

2 **Patients with Chronic Pain**
16 **Dx and Rx of Borderline Patients**
1-3 p.m.—Ancora Psychiatric Hospital
(Ancora Psychiatric Hospital and AMNJ)

2 **Topic to be announced**
16 **Orientation of Public to Mental Health Services**
30 **Cannabis Users in Jamaica**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

2 **Ongoing Child Psychiatry Case**
9 **Conference and Lecture**
16 8:30-10:30 a.m.—Trenton Psychiatric
23 Conference
30 *(Trenton Psychiatric Hospital and AMNJ)*

3 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group)

3 **Psychiatric Lecture Series**
10 11 a.m.-12 noon—Greystone Park
24 Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

4 **Psychiatric Lecture Series**
11 1:30-5 p.m.—Trenton Psychiatric
18 Hospital
25 *(Trenton Psychiatric Hospital and AMNJ)*

7 **Neuroscience Conferences**
14 11:30 a.m.-12:30 p.m.—Bergen Pines
21 County Hospital, Paramus

The University of Pennsylvania

School of Medicine
Department of Psychiatry

Psychiatry for the 80s

A continuing medical education conference

Atlantic City

World International Hotel
June 6-8, 1980

John Paul Brady, M.D.
Charles P. O'Brien, M.D., Ph.D.
George E. Ruff, M.D.
University of Pennsylvania

John Gunderson, M.D.
Harvard Medical School

Richard I. Shader, M.D.
Tufts University School of Medicine

For information contact:
Marion Malakoff, Program Coordinator
Department of Psychiatry,
University of Pennsylvania
Philadelphia, PA 19104 (215) 662-2849

28 *(Bergen Pines County Hospital and AMNJ)*

7 **Psychopathology of a Bisexual Girl**
8-10 p.m.—60 Melrose Place, Montclair
(Essex Psychiatric Seminar and AMNJ)

8 **Neurology**
11 a.m.—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

9 **Homosexuality**
8:30-10:30 p.m.—Guido's Restaurant, Hackensack
(North Jersey Psychiatric Society and AMNJ)

9 **Grand Rounds in Psychiatry and Mental**
23 **Health Science**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

10 **Sleep Disorders**
8-9 p.m.—Rancocas Valley Hospital, Willingboro
(Burlington County Medical Society and AMNJ)

16 **Special Problems in Neurology: A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

16 **Working with Parents of Adolescents with Alcohol and/or Drug Addiction Problems**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(The Carrier Foundation and AMNJ)

18 **Psychiatric Management of Cardiac Disease**
8:30-9:30 p.m.—Riverside General Hospital, Secaucus
(Riverside General Hospital and AMNJ)

May

1 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

1 **Psychiatric Lecture Series**
8 11 a.m.-12 noon—Greystone Park
22 Psychiatric Hospital
29 *(Greystone Park Psychiatric Hospital and AMNJ)*

2 **Psychiatric Lecture Series**
1:30-5 p.m.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

5 **Death in the Family**
8-10 p.m.—1046 South Orange Ave., Short Hills
(Essex Psychiatric Seminar and AMNJ)

5 **Neuroscience Conferences**
12 11:30-12:30 p.m.—Bergen Pines
19 County Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

6 **Seminar on Law and Psychiatry**
13 3:30-5:30 p.m.—Rutgers Law School,
20 Newark
27 *(Rutgers University Law School and AMNJ)*

6 **Psychiatric Case Conference**
13 7:30-9:30 a.m.—Trenton Psychiatric
20 Hospital
27 *(Trenton Psychiatric Hospital and AMNJ)*

7 **Dx and Rx of Depressed Adolescents**

21 **Geriatric Psychiatry**
1-3 p.m.—Ancora Psychiatric Hospital Hammonton
(Ancora Psychiatric Hospital and AMNJ)

7 **Ongoing Child Psychiatry Case**
14 **Conference**
21 8:30-10:30 a.m.—Trenton Psychiatric
28 Hospital
(Trenton Psychiatric Hospital and AMNJ)

10 **Psychotropic Use in the Medically Ill**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

11 **Cerebral Ischemia**
9 a.m.-12 noon—Meadowlands Hilton
(CMDNJ and AMNJ)

14 **Grand Rounds in Psychiatry and**
28 **Mental Health Sciences**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

16 **Management of Seizure Disorders**
12 noon—Freehold Area Hospital
(AMNJ)

19 **Visual Syndrome Identification**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

21 **Early Home Environment and Adult Diagnosis**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

21 **Special Problems in Neurology-A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

21 **Recreation Therapy**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(Carrier Foundation and AMNJ)

21 **Management of Violent Patient**
1:30-3:30 p.m.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

22 **Office Management of Sexual Problems**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

OBSTETRICS/GYNECOLOGY

Apr.

2 **Distinguished Lectures in Obstetrics and Gynecology**
8-10 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

2 **Distinguished Lectures in Obstetrics and Gynecology**
8-9 p.m.—Coachman Inn, Cranford
(CMDNJ and AMNJ)

2 **Grand Rounds in Ob/Gyn**
9 3-5 p.m.—Rotates between College
16 Hospital, Newark Beth Israel
23 Medical Center, St. Michael's Medical
30 Center, Newark, St. Joseph's Hospital and Medical Center, Paterson and Jersey City Medical Center
(CMDNJ and AMNJ)

3 **Grand Rounds in Obstetrics and**
10 **Gynecology**
17 4-5 p.m.—College Hospital, Newark
24 *(CMDNJ and AMNJ)*

9 **Anesthesia in Toxemia of Pregnancy**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

17 **Annual Clinical Meeting**
8 a.m.-5 p.m.—Rutgers Medical School, Piscataway
(NJ Obstetrical and Gynecological Society and AMNJ)

May

1 **Grand Rounds in Obstetrics/**
8 **Gynecology**
15 4-5 p.m.—College Hospital, Newark
22 *(CMDNJ and AMNJ)*
29

7 **Distinguished Lectures in Obstetrics/ Gynecology**
8-10 p.m.—Coachman Inn, Cranford
(CMDNJ and AMNJ)

7 **Combined Grand Rounds in Obstetrics/**
14 **Gynecology**
21 3-5 p.m.—Rotates between College
28 Hospital, Newark Beth Israel Medical Center, St. Michael's Medical Center, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

21 **Ovarian Tumors**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

PATHOLOGY

Apr.

8 **Renal Biopsy Conferences**
12:30 p.m.-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

8 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

9 **Hemotherapy: 1980 Update**
1-2:30 p.m.—VA Medical Center Lyons
(VA Medical Center and AMNJ)

May

13 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

13 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

17 **Annual Meeting: Immunopathology**
Rutgers Medical School, Piscataway
(NJ Society of Pathologists and AMNJ)

PEDIATRICS

Apr.

1 **Recurrent Urinology Infections in Pediatrics**
9 a.m.—Freehold Area Hospital
(Freehold Area Hospital and AMNJ)

2 **Orthopedics in Children**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(St. Mary's Hospital and AMNJ)

16 **First Annual George Heller Memorial Lecture**
Top Ten Pediatric Stories of 1979
6:30—Dinner, 7:30-9 p.m.—Englewood Hospital, Englewood
(Englewood Hospital and AMNJ)

21 **The Neonate and Its Placenta**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

May

3 **Anesthesia for the Neonate**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

6 **Failure to Thrive (Pediatrics)**
9 a.m.—Freehold Area Hospital
(AMNJ)

7 **Pediatric Infectious Diseases**
10:30 a.m.-12 noon—St. Mary's Hospital
Passaic
(AMNJ)

RADIOLOGY

Apr.

9 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

12 **Major Symposium—Abdomen: The CAT vs. the ECHO**
9 a.m.-5 p.m.—Sheraton Inn, Newark Airport
(Radiological Society of NJ, NJ Institute of Ultrasound in Medicine and AMNJ)

17 **Topic to be announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Radiological Society of NJ, Diagnostic Radiology Section for Northern NJ and AMNJ)

May

8 **Doppler and Ultrasonic Imaging in Peripheral Vascular Disease**
7:30-9:30 p.m.—Overlook Hospital, Summit
(NJ Institute of Ultrasound in Medicine and AMNJ)

14 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

15 **To be Announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Radiological Society of NJ, Diagnostic Radiology Section for Northern NJ and AMNJ)

20 **Radiology**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

21 **Radiotherapy Section Dinner Meeting**
6:30 p.m.—The Manor, West Orange
(AMNJ)

GENERAL SURGERY

Apr.

1 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

1 **Tumor Conferences**
8 11 a.m.-12 noon—Morristown
15 Memorial Hospital
22 *(Morristown Memorial Hospital and*
29 *AMNJ)*

7 **Distinguished Lecture Series in**
14 **Surgery and Grand Rounds**
21 4:30-5:30 p.m.—NJ Medical School,
28 Newark
(CMDNJ and AMNJ)

15 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ and AMNJ)

18 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

22 **Reconstructive Microsurgery and Replantation**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

May

6 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

6 **Tumor Conferences**
13 11 a.m.-12 noon—Morristown
20 Memorial Hospital
27 *(Morristown Memorial Hospital and AMNJ)*

16 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

19 **Distinguished Lecture Series in Surgery**
4:30-5:30 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

27 **Frozen Sections In Surgical Pathology**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

SURGICAL SPECIALTIES (includes FNT, Neurosurgery, Ophthalmology, Orthopedic, Plastic, and Vascular Surgery.)

Apr.

9 **Peripheral Vascular Disease**
1:30 p.m.—John E. Runnells Hospital, Berkeley Heights
(John E. Runnells Hospital and AMNJ)

22 **Peripheral Vascular Disease**
11 a.m.—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

23 **Cardiovascular Disease Pharmacology**
No time given—Hoffmann-LaRoche, Nutley
(AMNJ)

May

7 **Cardiovascular Surgery**
1:30 p.m.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

27 **Thoracic Surgery**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

MISCELLANEOUS

Apr.

2 **Ethical Issues in Medical Practice**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

6 **Developmental Biology**
10 4-6 p.m.—Institute for Medical
24 Research, Camden
(Institute for Medical Research and AMNJ)

18- **Seminar for Physician Negotiators**
19 Cherry Hill Holiday Inn, Cherry Hill
(AMA Dept. of Negotiations)

25 **Contribution of Protein Structure to Immunogenicity**
4 p.m.—Rutgers University, Piscataway
(Basic Medical Sciences Section AMNJ)

30 **Malpractice**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(St. Mary's Hospital and AMNJ)

30 **Hate, Hostility, Aggression**
9 a.m. (All day)—East Brunswick Chateau, East Brunswick
(NJ Public Health Assoc., NJ State Dep't. Health, AMNJ)

May

1 **Development Biology**
8 4-6 p.m.—Institute for Medical Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

5 **Nutrition and Oral Health**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

7 **Organizational Meeting: NJ Society for History of Medicine**
11 a.m.—Academy of Medicine
2 Princess Rd., Lawrenceville
(AMNJ)

10- **Annual Meeting, MSNJ**
13 Meadowlands Hilton, Secaucus

28 **Annual Awards Dinner**
6 p.m.—Chanticler, Millburn
(AMNJ)

28 **Ethical Dilemmas in Medicine**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

OBITUARIES

Dr. Francis J. Benz

One of Morris County's well-known practitioners, Francis J. Benz, M.D., died on January 3 in Overlook Hospital, Summit, after a long illness. A native of Newark, born in 1910, Dr. Benz was graduated from Georgetown University Medical School, class of 1934, and pursued a career in general surgery. For many years he had been on the surgical staff at All Souls Hospital, Morristown and in addition served as president of the medical staff. He also was affiliated with Morristown Memorial and Overlook Hospitals. Dr. Benz was active in organized medicine, having been president of his county medical society, and at the state level serving as a member of MSNJ's Board of Trustees from 1967 to 1976. He also had been a member of the Council on Medical Services and of the Negotiating Committee on Medicaid. He was active in the American Cancer Society, having been chairman of the executive committee of the Morris County Chapter. During World War II Dr. Benz served in the medical department of the AUS.

Dr. John S. Cregar

We just have learned of the death a year ago (February 27, 1979) of John S. Cregar, M.D., formerly of East Orange. Born in New Jersey in 1906, Dr. Cregar was graduated from Cornell University Medical School in 1931 and pursued a residency in opthalmology at New York Eye and Ear Infirmary, becoming board certified in that specialty. He had been affiliated with East Orange General and Orange Memorial Hospitals and the New York Eye and Ear Infirmary. Dr. Cregar was a Fellow of the American College of Surgeons and of the Academy of Medicine of New York. He also was a member of the Academy of Medicine of New Jersey and of the American Academy of Opthalmology and Otolaryngology. He had retired in 1975 and was living in Greenwood Lake, New York.

Dr. Herbert W. Engel

At the untimely age of 52, Herbert W. Engel, M.D., a member of our Ocean County component, died on January 17, at Monmouth Medical Center in Long Branch. A native of the Bronx, Dr. Engel was graduated from Jefferson Medical College, class of 1951, and following completion of a residency at the Michael Reese Hospital in Chicago, pursued a career in internal medicine, becoming board certified in his field. He was an associate professor of internal medicine and hematology at Hahnemann Medical College in Philadelphia, and had been on the staff at Monmouth Medical Center, Jersey Shore Medical Center in Neptune, Riverview Hospital in Red Bank, and Hahnemann Hospital, Philadelphia.

Dr. Francis J. Grant

Francis J. Grant, M.D., formerly of Hillside, New Jersey, died on October 14, 1979 at his home on Johns Island, South Carolina. A native of Brooklyn, Dr. Grant was graduated from New York Medical College in 1941 and pursued a residency in opthalmology at Newark Eye and Ear Infirmary and New York Postgraduate Hospital. He was a Fellow of the American College of Surgeons and of the International College of Surgeons and had been affiliated with St. Elizabeth's Hospital in Elizabeth and Newark Eye and Ear Infirmary and St. James Hospital in Newark. He had been active in civic affairs and was a member and former president of the board of health of Hillside. Dr. Grant had been retired for some time and was 70 years old at the time of his death.

Dr. George W. Grenhart

Word just has been received that a former medical examiner for Camden County, George W. Grenhart, M.D., died following a cerebral vascular accident on November 18, 1979, at West Jersey Hospital in Camden where he was a member of staff. A native of Philadelphia, Dr. Grenhart earned his medical degree from Hahnemann Medical College in 1933 and pursued a career in orthopedics. He served as medical examiner for the New Jersey Workmen's Compensation Board for 15 years and had had a term on the board of trustees of the West Jersey Hospital. Doctor Grenhart retired from active practice in 1974. During World War II he served in the United States Navy in England, Australia, and Japan. Dr. Grenhart was 78 years old at the time of his death.

Dr. Gay Bong Kim

At the grand age of 83, Gay Bong Kim, M.D., retired director of the department of pathology at St. Joseph's Hospital and Medical Center, in Paterson, died on December 26, 1979 in Honolulu. A native of Korea, Dr. Kim grew up in Hawaii and earned his medical degree at Boston University School of Medicine in 1922. He took graduate work in pathology at Johns Hopkins Hospital and came to New Jersey in 1924 to practice that specialty at St. Joseph's Hospital where he remained until retirement to Hawaii in 1960. Dr. Kim was board certified in pathology and a Fellow of the American College of Pathology. In 1972 he was recipient of MSNJ's Golden Merit Award.

Dr. Irving Lerman

At the grand age of 90, Irving Lerman, M.D., formerly of Elizabeth, died on January 21 in Neptune Convalescent Center. A native of Russia, Dr. Lerman was graduated from New York University School of Medicine in 1915 and pursued a career in urology becoming board certified in that specialty. He also was a Fellow of the American College of Surgeons. He had been affiliated with Elizabeth General, St. Elizabeth, and Alexian Brothers Hospitals in Elizabeth, and with Rahway Memorial Hospital. Dr. Lerman was active in medical affairs and had been president and secre-

tary of his county medical society (Union) and president of the medical board of Elizabeth General Hospital. He was police surgeon for the city of Elizabeth and director of the venereal diseases clinic for the Elizabeth board of health. In 1965 Dr. Lerman was a recipient of MSNJ's Golden Merit Award indicating 50 years of service as a physician.

Dr. Mayer R. Lightdale

At the untimely age of 44, Mayer R. Lightdale, M.D., a member of our Essex County component from Basking Ridge, died suddenly at St. Agnes Hospital, White Plains, New York. A native of New Jersey, Dr. Lightdale was graduated from Columbia University's College of Physicians and Surgeons in 1963. After interning in Jackson Memorial Hospital in Miami, Florida, he took a residency there in neurology, and subsequently one in internal medicine at the Montefiore Hospital in the Bronx. This was followed by a research fellowship in neurophysiology at Harvard Medical School. Dr. Lightdale was associated with Harvard University's Health Services for nine years until coming to New Jersey in 1976 to serve as staff physician at the American Cyanamid Company. Currently he had been practicing internal medicine in Newark and was affiliated with St. Michael's Medical Center there.

Dr. William London

One of Middlesex County's senior members, William London, M.D., died at Perth Amboy Hospital on January 14. Dr. London, a native of Newark, earned his medical degree from New York University, class of 1918, and pursued a career in pediatrics, after completing a residency at Children's Hospital in New York. He was the first pediatrician to come to Perth Amboy and established that hospital's department of pediatrics of which he was director for 44 years. He was board certified in his specialty and had been affiliated also with Memorial Hospital in South Amboy and Roosevelt Hospital in Metuchen. Dr. London was 83 years old at the time of his death. He had been a recipient of MSNJ's Golden Merit Award in 1968.

Dr. Milton E. Lowell

Word just has been received that Milton E. Lowell, M.D., died of pneumonia in Burlington County Memorial Hospital in Mount Holly on November 26, 1979. A native of Pennsylvania, Dr. Lowell was graduated from the University of Pittsburgh School of Medicine in 1923 and pursued a career in dermatology. He was board certified in that specialty and had been affiliated with St. Barnabas Medical Center in Livingston and Muhlenberg Hospital in Plainfield. Dr. Lowell, formerly of Westfield, was a member of our Union County component. He had received MSNJ's Golden Merit Award in 1973 and was 81 years of age at the time of his death.

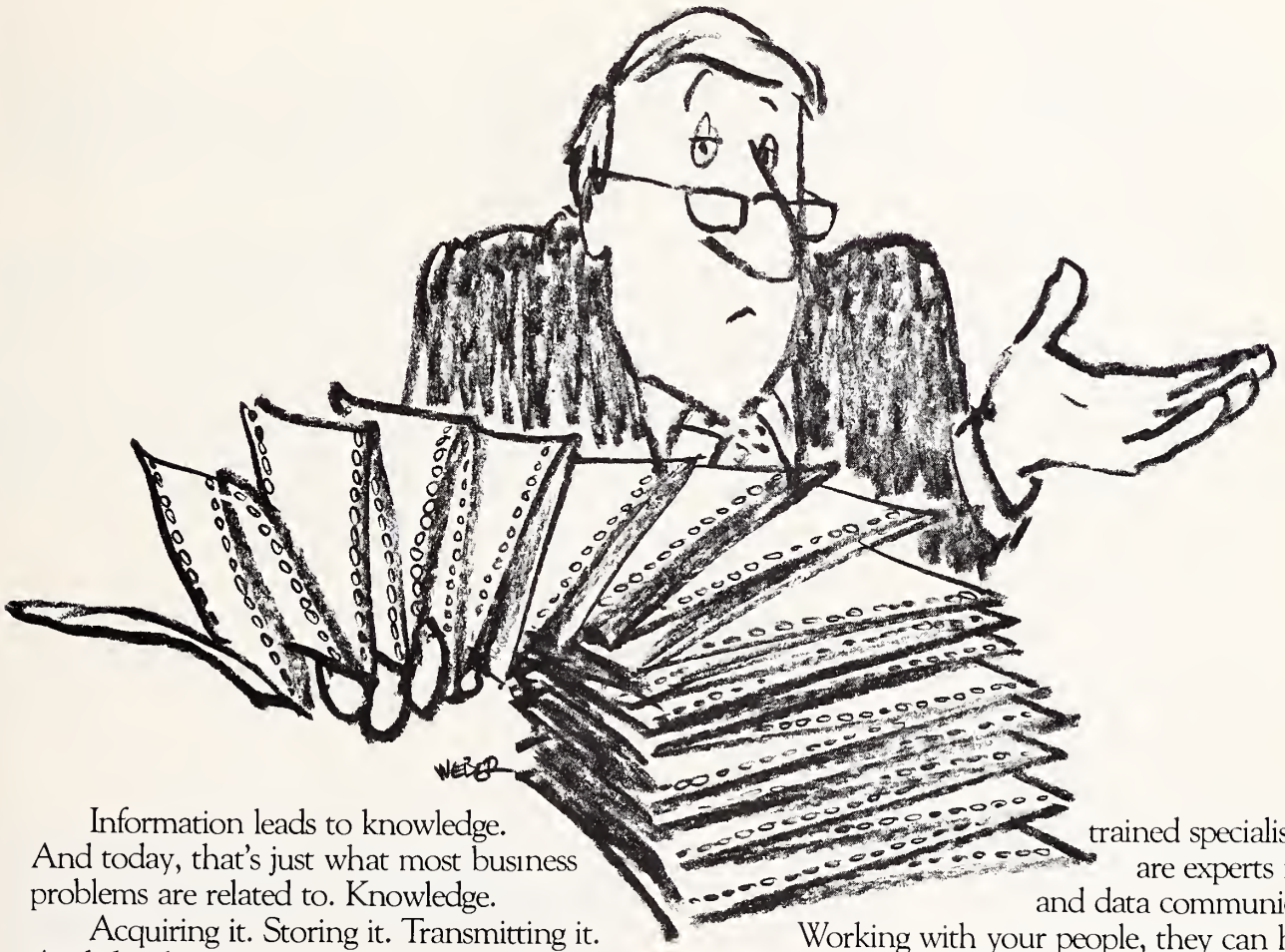
Dr. Stephen Silverman

At the untimely age of 40, Stephen A. Silverman, M.D., of New Brunswick died, on December 22, 1979, after a long illness. A native of New York, Dr. Silverman was graduated from Tulane University School of Medicine in 1964 and pursued a residency in general surgery at the Veterans Administration Hospital in the Bronx, New York and in otolaryngology at New York Eye and Ear Infirmary. Before coming to New Jersey in 1973, he had been full-time director of residency training at the last-named institution. He was board certified in otolaryngology and a Fellow of the American College of Surgeons. Dr. Silverman was associated with Middlesex General and St. Peter's Hospitals in New Brunswick and was assistant professor of otolaryngology at Rutgers Medical School.

Dr. Earl Stage

Earl Stage, M.D., a member of our Morris County component, died on January 25 after a brief illness. A native of Newark, born in 1905, Dr. Stage was graduated from New York University Medical College, class of 1931, and pursued a career in general surgery. He had been affiliated with Morristown Memorial Hospital and Community Medical Center in Morristown, Riverside Hospital in Boonton, and Hackettstown Community Hospital. Dr. Stage was a Fellow of the American College of Surgeons and of the International College of Surgeons. During World War II he had served in the medical department of the AUS.

WE CAN HELP YOU TURN USEFUL INFORMATION INTO USABLE INFORMATION.



Information leads to knowledge. And today, that's just what most business problems are related to. Knowledge.

Acquiring it. Storing it. Transmitting it. And distributing it.

If you don't have a good system for handling knowledge, your productivity is going to suffer. And so is the productivity of your entire organization.

That's where New Jersey Bell comes in.

Our Account Executives can put the knowledge business to work for you.

Our Account Executives are trained, industry by industry, to understand your business. And to recognize the problems it's facing.

But they're also backed by a team of industry-trained specialists who are experts in voice and data communications.

Working with your people, they can help you plan, design and implement an integrated voice and data communications system.

Call New Jersey Bell first.

Call in your New Jersey Bell Account Executive now and let us help you evaluate your current system to make sure you're getting the most out of it.

Or, if you're considering a new system, call in your Account Executive early. During the planning process.

That's when our expertise in the knowledge business can do your business the most good.

The knowledge business

New Jersey Bell

BOOK REVIEWS

What You Should Know About Medical Lab Tests

Bernard Kliman, M.D., R. Vermette, E. Kolowrat. New York, Lippincott/Crowell, 1979. Pp. 207 ($9.95)

This hard-cover book is not a medical text. It is not directed to the physician, medical student or medical technologist; contrariwise it appears to be directed to the non-medically educated reader. It is comprised of 14 chapters, an appendix which is really a macroglossary of words used daily by those of us who practice clinical pathology, and an adequate index. The text is clear and well written, most in non-medical language and when scientific terms must be used they are explained clearly.

I believe this book will find its principal readership in those who have a medical problem either in themselves or in the family, and want to know more about the laboratory aspects of it than they understood from their physician. For these persons I believe the information will be valuable and of interest.

Hugh F. Luddecke, M.D.

Vitamin C Against Cancer

H.L. Newbold, M.D., Briarcliff, New York, Stein and Day, 1979. Pp 363 (No price given)

Dr. Newbold, a "medical nutritionist with a large private practice in New York City" recapitulates the Linus Pauling and Ewan Cameron claims of the efficacy of high-dose Vitamin C in terminal cancer patients, in this recently published book. He also quotes two Australian physicians (one of whom refused to be identified) with "wide experience in the use of Vitamin C to treat cancer." One physician recalled treating "somewhere between 30 and 40" terminally ill patients and the other "maybe 50" cancer patients. Both physicians were very enthusiastic about their results, but supplied no data regarding objective remissions or length of survival. Dr. Newbold also gave details of Vitamin C therapy in a woman with lung cancer who had complete remission by chemotherapy at a leading eastern cancer center but found the side effects too debilitating. She opted for megadose Vitamin C therapy instead of continuing her chemotherapy protocol and is described on the cover jacket as "one of a growing number of people in similar seemingly hopeless situations who have shown markedly positive response to Vitamin C treatment."

To maintain balance in his presentation, the author also quoted recognized experts in cancer research (Joseph Burchenal, Robert Good, and Charles Huggins) who were less sanguine that megadose Vitamin C is the answer to the cancer problem. The author details his techniques of administering maximum levels of oral and intravenous Vitamin C and his favored program of nutrition in cancer treatment and the use of "vitamins and minerals to prevent cancer."

Readers of this book, just published, will not have the advantage of knowing that: (1) the first carefully controlled double-blind study of high dose Vitamin C therapy in advanced cancer patients failed to show any therapeutic benefits from this regimen (Creagan, *et al, N Engl J Med* 301:687-690, Sept. 27, 1979) and (2) the author's prize patient, who turned her back on successful combination chemotherapy for Vitamin C, recently died at the eastern cancer center whose dedicated physicians accepted her back with advanced disease after she followed the siren song of the "orthomolecular (non-toxic) treatment of cancer." Vitamin C is undoubtedly essential in human metabolism and may prove yet to be of some value as an adjunct to other modalities of cancer therapy. This book, however, hardly can be regarded as a definitive statement of its role.

Bernard J. Koven, M.D.

Man, Mind, and Science: A History of Anthropology.

M. J. Leaf. New York, Columbia University Press, 1979. Pp 376 ($20)

Sharing a common interest in the study of mankind, medicine and anthropology naturally have had close associations. Indeed it is Johann Friedrich Blumenbach (1752-1840), the German physician and anatomist, who usually is honored as the father of the new science, and such eminent medical men as Broca, Virchow, Lombroso and Cajal—to name but a few—have made significant contributions to its progress.

This present book should prove a welcome addition to the library of any practitioner who wishes to expand his intellectual environment without wandering too far afield from man, the object of his daily concern. Dr. Leaf guides his reader carefully through the philosophical foundations of the emerging discipline. Even here—although the author does not emphasize their medical background—we note the importance of Descartes, Locke and Leibniz. He then goes on to study the relevance of sociology, comparative biology, tribal structure, exploration and archeology in the formulating of anthropological theory. Of course, the revolution caused by Darwin and his followers is fully considered and evaluated, and due respect is paid to the seminal influence of Franz Boas and Bronislaw Malinowski.

If any fault is to be found in this stimulating book it stems from the author's enthusiasm and desire for all-inclusiveness. I believe he might well have devoted less space to the minutiae and vagaries of theory and given the non-specialist the benefit of enlightened generalizations based on personal opinion. Yet I am convinced that any physician who reads this volume with care will have an increased awareness of the structure of the family, the development of society and the problems which menace the human community today.

Morris H. Saffron, M.D.

Real Estate—See 231

Personnel—See 231

DOCTOR'S HOME AND MEDICAL SUITE

Beautiful 9-room Split Level home with 5-room Medical Suite located in prime area of Union County. Features 25' living room with fireplace, dining room, kitchen, 4 bedrooms, 2-1/2 baths, family room + 54' x 26' Recreation Room w/fireplace, wet bar, and open hearth barbecue. Also includes corner lot and 2 car garage.

Medical Suite includes waiting room, 2 treatment rooms, 2 offices, and lav.

ESTABLISHED MEDICAL PRACTICE—Chiefly Internal Medicine. Will assist in financing. Phone 201-276-1900 or write to Paige, Paige & Richards, Realtors, P.O. Box 594, Cranford, N.J. 07016.

MEDICAL CENTER FOR SALE

Complete x-ray room with table and dark room. Sinks, cabinets, waiting room couches and other equipment. Best offer. Everything in excellent condition. Guaranteed. Call Toll Free

1-800-327-9009 ext. 232

OFFICE SPACE

Marlboro

Established location in growing affluent community. Approx. 650 sq. ft. Summer occupancy. Three additional units can be built to your specifications. Pediatrician and dentist currently in complex.

Colonial Professional Building
9 S. Main St.
Marlboro, N.J. 07746
(201) 431-1614

Ocean County
(Five miles south of Toms River)

THE SOLARIUM



Renting 704 square feet

Present Occupants: General Dentist
Internal Medicine

NEW PROFESSIONAL BUILDING
FOYER WITH SKYLIGHTS & PLANTS
CUSTOM LAYOUT
HOSPITAL PRIVILEGES
GROUND LEVEL
CENTRAL AIR
CARPETING
AMPLE PARKING

For more information
Call 269-3200

OFFICE SPACE FOR RENT

Office space available in attractive new professional building located on Main Street in center of town, central New Jersey area, with large hospital five minutes away. Presently, one active medical office in town of 14,000 plus. Presents an unusual opportunity for an immediately successful practice.

Call (201) 722-2928 for additional information.

SYCAMORE PROFESSIONAL BUILDING
Tinton Falls (Monmouth County)

One Suite now available (1100+ sq. ft.) in well established Medical Building. Suitable for any Medical Specialty. Beautifully landscaped on a busy thoroughfare, ample parking. Will finish to suit.

Call Dr. S. Furman
(201) 542-4433

PHYSICIAN

EMERGENCY ROOM PHYSICIAN

235 bed accredited hospital located in South Jersey has a full time position available for a career oriented Physician with background or medical training in Emergency medicine. This active Emergency service had 25,000 visits last year. N.J. license required. Liberal fringe benefits. Competitive salary, paid malpractice. Coverage on equal rotation of 39 hours per week. Send CV to:

JAMES J. DUNCAN, PERSONNEL DIRECTOR
NEWCOMB HOSPITAL
65 S. State Street
Vineland, N.J. 08360

Equal Opportunity Employer

NEEMA EMERGENCY MEDICAL
—a professional association—

EMERGENCY MEDICINE POSITIONS: available with emergency physician group throughout Pa., N.Y., N.J., Mich. and Southeastern U.S. including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits towards board certification. Physician department directors also desired. Please send resume to:

NEEMA Emergency Medical
Ste 400
399 Market St.
Phila., Pa. 19106

In PA call
(215) 925-3511
Those outside of PA call
(800) 523-0776

MEDICAL DIRECTOR

Position of Chief of Medical Department and Director of Medical School Affiliated Medical Residency Program in approximately 400 bed general, non-profit hospital. Available July 1 or sooner. Active teaching program with multiple sub-specialty divisions in the department. Salary commensurate with qualifications. Apply to:

Medical Department Search Committee
c/o Mr. William T. Payne, Jr.
Administrator
Helene Fuld Medical Center
750 Brunswick Ave.
Trenton, N.J. 08638

SURGICAL ASSISTANTS

New Jersey licensed Physicians needed July 1, 1980 for house Surgical Assistants in 375-bed medical center.

Assist in Operating Room (general surgery & Gyn) and cover house for surgical patients night & weekends.

Excellent salary and fringe benefits program including malpractice insurance.

Submit resume to: Harry S. DiMemmo
Asst. Admin.
HELENE FULD MEDICAL CENTER
750 Brunswick Avenue
Trenton, New Jersey 08638

Equal Opportunity Employer M/F

Picture yourself as an Air Force Physician

Consider an excellent income without overhead cost or red tape. Thirty days of paid vacation each year. Associates to care for your patients while you're away. Continued professional education. An income that continues if you're ill. Medical care for yourself and your family. And, if you qualify, a lifetime retirement income equivalent to half your base salary after only 20 years of active duty.

Additionally, well-equipped and well-staffed hospitals and clinics provide an excellent environment for your profession. And we know that's important to you.

Put yourself in the picture of good health care in the Air Force Medical Service.

For more information, contact:

Northern NJ
Capt. Richard T. Chamberlain
USAF Medical Recruiting
376 Hamburg Turnpike
Wayne, NJ 07470

Southern NJ
Capt. Marty Csercsevits
USAF Medical Recruiting
2201 Rt. 38, Suite 730
Cherry Hill, NJ 08002

Air Force. A great way of life.

RESIDENCY IN PHYSICAL MEDICINE AND REHABILITATION

Dynamic, young program with balanced academic and clinical emphasis under the supervision of 10 physiatrists. Three year program and integrated internship/residency with opportunity for research and pursuit of special interests both in medical school and private hospital settings. Stipends from $14,900 to $17,000 depending on qualifications. We will pay for visits in selected cases. Equal Opportunity/Affirmative Action Employer. Telephone or write for information to:

John F. Ditunno, Jr., M.D., Director
Department of Rehabilitation Medicine
Thomas Jefferson University Hospital
11th and Walnut Street
Philadelphia, Pa. 19107
Telephone: (215) 928-6573

CLASSIFIED ADVERTISEMENTS

CARDIOLOGIST—Board certified internal medicine and cardiology. Age 32. Available immediately. Box No. 181 c/o JOURNAL, MSNJ.

INTERNIST—Seeking solo or small group practice opportunity in primary care internal medicine. West central New Jersey. Reply P.O. Box 162, Red Lion, Pa. 17356.

OPHTHALMOLOGIST—Recently completed residency. Seeks to purchase practice or associate with established practice. Write Dr. R.A. Serniuk, 502 Thompson Avenue, Roselle, N.J. 07203. Telephone (201) 245-3683.

OPHTHAMOLOGIST—Presently in practice elsewhere wishes to associate with or take over an established practice in New Jersey. Write Box No. 182, c/o JOURNAL, MSNJ.

RADIOLOGIST—Board certified in Radiology and Nuclear Medicine. Currently associated with a teaching hospital, desires relocation in the South Jersey area. Part-time position considered. Reply Box No. 184, c/o JOURNAL, MSNJ.

UROLOGIST—Will consider all types of practice. Well trained at major N.Y.C. university center. Available July 1980. G. Rosenberg, M.D., 205 W. 15th Street, New York City, N.Y. 10011.

PEDIATRIC ASSOCIATE—New Jersey Shore area, 1-1/2 hours to New York City and Philadelphia. Write Box No. 183, c/o JOURNAL, MSNJ.

EMERGENCY ROOM PHYSICIAN—Full or Part Time. Central New Jersey. Academically oriented. Modern facility. Financially rewarding. E.V. McGinley, M.D., (201) 277-0441.

PEDIATRICIAN—To join established practice in Bergen county in July 1980. Board eligible or certified. Excellent opportunity. Write Box No. 175, c/o JOURNAL, MSNJ.

PEDIATRICIAN—To join two-man Pediatric Group. Board eligible or certified. Ideal opportunity in excellent community. North Jersey, 20 minutes from New York City. Full time. Send Curriculum Vitae to Box No. 180, c/o JOURNAL, MSNJ.

NEEDED—Family Practice to BUY in Elizabeth. Call (212) 698-5541.

FAMILY PRACTITIONER/INTERNIST—Great opportunity to buy a well-established practice of 35 years. Hospital affiliation, excellent location, Bergen County, Northern New Jersey. 10 miles from New York. Write Box No. 185, c/o JOURNAL, MSNJ.

GENERAL MEDICAL PRACTICE—Unexpected availability of busy general medical practice and completely equipped office. (201) 521-0881.

ALLERGY PRACTICE—Retiring, 35 years. Equipment also For Sale. Beautiful office, professional building, suburban Essex County. Liberal terms. Will introduce. Send resume. Write Box No. 178, c/o JOURNAL, MSNJ.

FOR SALE—Home/Office of general practitioner. 30 miles from New York City. Practice for price of home. Write Box No. 186, c/o JOURNAL, MSNJ.

FOR SALE—Home/Office. Four bedroom house with completely equipped six room doctor's office with x-ray and dark room. Residential area. After March 15th call (201) 985-2121 or write Ruth Gandek Geddings, 2151 Woodbridge Avenue, Edison, N.J. 08817.

FOR SALE—Office/Home. Maplewood. Unusual set-up in excellent area. Prime condition, family practice. Write P.O. Box 202, Maplewood, N.J. 07040.

FOR SALE—Office/Home. Union County. Elegant, modern split level home-office with private entrances in affluent area. Equipped office with x-ray. High net Family Practice, chiefly Internal Medicine. Retiring Near seashore, New York City. Good schools. Hospital 10 minutes. Write Box No. 172, c/o JOURNAL, MSNJ.

FOR SALE—Home/Office. Millburn. Living area 2,000 sq. ft. Additional 1,000 sq. ft. presently used as dental office. Easily convertible to medical office. Property excellent condition. Call 8 P.M. to 10 P.M. (201) 376-7840.

FOR RENT—Medical Office Space. New and fully equipped, part/full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE TO SHARE—Bergen County. Fully equipped for elective surgery with operating and recovery. Ideal for Eye, ENT, Plastic. In Fort Lee. Convenient to all northern Jersey, New York, Westchester and Long Island. Modern skyscraper, private entrance, parking. Will subdivide to suit. Write Box No. 176, c/o JOURNAL, MSNJ.

OFFICE SPACE—Haddonfield. Two psychiatrists and M.S.W. seeking 4th associate to rent office in a 4 office suite in Haddonfield. Please call (609) 428-6910 if interested.

OFFICE SPACE—Modern efficient office for rent. Irvington Center, brick building on good street. 5 rooms, all panelled, acoustical ceiling, sound system in all rooms. Call (201) 373-1326.

OFFICE SPACE—Moorestown. Renting custom medical offices built to suit. Solar heated medical building near Route 38 and 295 and Philadelphia. (609) 235-2651.

FOR RENT—Physician's office. Furnished. Centrally located in New Brunswick, Call (201) 545-1660.

FOR RENT—Short Hills, N.J. Spaces available both full-time and part-time. Short Hills Medical Building, Inc. Modern facility located in heart of beautiful suburb. Ample parking. Send resume. For information: P.O. Box 226. Short Hills, N.J. 07078.

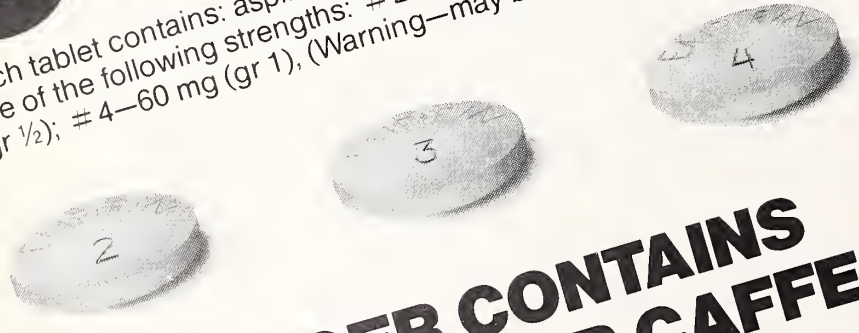
SPACE—New medical office building in Somerset County. Two suites available. Pediatrician, Family Practitioner or Surgical Specialist especially needed. Excellent location with hospital and medical school affiliation possible. Call (201) 754-4111.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

EMPIRIN® COMPOUND ℂ CODEINE IS NOW EMPIRIN® ℂ CODEINE



Each tablet contains: aspirin, 325 mg; plus codeine phosphate in one of the following strengths: #2—15 mg (gr ¼); #3—30 mg (gr ½); #4—60 mg (gr 1), (Warning—may be habit-forming) Ⓒ III



NO LONGER CONTAINS PHENACETIN OR CAFFEINE.

ONE HUNDRED YEARS WELLCOME

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709



The Library
Acquisitions Division

LIBRARY
U.C. SAN FRANCISCO
APR 24 1980

April 1980

Journal of the Medical Society of New Jersey

Medical Malpractice Insurance
The Hon. J. J. Sheeran

Leukemia and Hodgkin's Disease
Environmental Investigation
T. A. Burke, M.P.H., et al.

Epidemiological Investigation
W. Halperin, M.D., et al.

Physicians and the DRG Model
P. L. Grimaldi, Ph.D.

Your Congressman Speaks

Complete Table of Contents on Page 236

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____

Expand your office diagnostic capabilities

The BREON SPIROMETER

MODEL 2400



- As accurate as standard pulmonary laboratory instruments
- Easy and economical to operate
- Simple to interpret

You can see and test it for yourself in a five-minute personal demonstration. Just fill in and mail the coupon below.

BREON

BREON LABORATORIES INC.

Instrument and Life Support Division
90 Park Avenue
New York, N.Y. 10016

Mail to:

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Attn: M. Trepicchio

☐ Please send me more information about the Breon Spirometer Model 2400.

☐ Please have your representative call to arrange a personal demonstration.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
PRESIDENT-ELECT
Augustus L. Baker, Jr., M.D. (Morris) Dover
FIRST VICE-PRESIDENT
Armando F. Goracci, M.D. (Gloucester) Woodbury
SECOND VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
IMMEDIATE PAST-PRESIDENT
Charles S. Krueger, M.D. (Burlington) Mount Holly
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
James S. Todd, M.D. (1980) (Bergen) Ridgewood
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Palma E. Formica, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1980) (Cumberland) Bridgeton
William Greifinger, M.D. (1981) (Essex) Belleville
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Alexander Kovacs, M.D. (1981) (Union) Scotch Plains
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1980) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Vacancy
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1980) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1980) Haddonfield
Karl T. Franzoni, M.D. (1980) Trenton
Henry J. Mineur, M.D. (1980) Cranford
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

April 1980

Publication Committee

John F. Marshall, M.D., *Chairman*
Julio C. del Castillo, M.D.
Paul J. Hirsch, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 910. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies, $1. Address communications to *The Journal*, MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

April 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

Volume 77
Number 4

Pages 233-316

241 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

245 Second Surgical Opinion No Solution for Judgment

246 When Politicians Play Doctor

247 Pushbutton Interns

COMMENTARY

249 Trends in Medicine and Modern Society

ORIGINAL ARTICLES

251 Zeal Without Understanding: Federal Intervention in Medicine
John J. Gartland, M.D., Philadelphia

254 Medical Malpractice Insurance
The Honorable James J. Sheeran, Trenton

259 Environmental Investigation of Leukemia and Hodgkin's Disease in Rutherford
T. A. Burke, M.P.H.; S. Gray, Ph.D.; C. M. Krawiec, B.S.; R. J. Katz, M.S.; P. P. Preuss, Ph.D.; G. Paulson, Ph.D., Trenton

267 Epidemiological Investigation of Leukemia and Hodgkin's Disease in Rutherford
W. Halperin, M.D.; R. Altman, M.D.; A. Stemhagen, M.P.H.; A. W. Iaci, M.S.; G. Caldwell, M.D.; T. Mason, Ph.D.; J. Bill, B.S.N.; T. Abe, M.S.W.; J. F. Clark, B.S., Trenton

CASE REPORT

275 Tracheal Papillomatosis in Asthmatic Presenting as Upper Airway Obstruction
F. D. Fortunato, M.D.; P. Bolanowski, M.D.; R. Carnes, M.D.; B. H. Safirstein, M.D., Newark

SPECIAL ARTICLE

279 Physicians and the DRG Model
Paul L. Grimaldi, Ph.D., Princeton

282 **ANNUAL MEETING HOUSING APPLICATION**

283 **ANNUAL MEETING DAILY SCHEDULE**

284 **NUTRITION UPDATE**

287 **PEDIATRIC BRIEFS**

291 **YOUR CONGRESSMAN SPEAKS**
Has the Tide Turned Against Socialized Medicine?
The Honorable James Courter, Washington, D.C.

294 **REPORT OF THE NOMINATING COMMITTEE**

DOCTORS' NOTEBOOK

295 Trustees' Minutes: February 17, 1980

298 Report from the Foundation

299 CMDNJ Notes

301 Physicians Seeking Location in New Jersey

300 **HELP FOR IMPAIRED PHYSICIANS**

304 **LETTERS TO THE JOURNAL**

305 **CME CALENDAR**

309 **OBITUARIES**

311 **BOOK REVIEWS**

Cover

Again we are grateful for our cover to John L. Krause, Jr., M.D., of Cherry Hill. The picture was taken in Greenwich, New Jersey in the Spring of 1978.

Note Dates and Location →

214th Annual Meeting
May 10-13, 1980
Meadowlands Hilton, Secaucus

Presented recently at an NJR Job Placement Conference

Certificate of Appreciation

The Vocational Rehabilitation Department
of New Jersey Rehabilitation Hospital
extends its Appreciation to

The Following Companies

for their Dedicated Efforts in Job Placement
of the Disabled.

Bertrand J. Bensam, M.D.
Medical Director

Anthony G. DiCarlo
Administrator

Donna McTernan
Director, Vocational Rehabilitation

February 28, 1980

Airco Incorporated
Advocate Publishing Company
Archdiocese of Newark, New Jersey
Bell Telephone Laboratories, Inc.
Bogue Electric Manufacturing Company
Breeze Corporation
Bristol-Myers Company
Broad National Bank
Caledonia Knitwear Company
City Federal Savings & Loan Association
Coin Depot Corporation
Drive-Master Corporation
East Orange Co-op Day Care Center, Inc.
Exxon Chemical Company, Incorporated
Gaffer's Pub
Hoffmann-La Roche, Incorporated
Howard Savings Bank
Hudson County Ceta
IBM Corporation
Internal Revenue Service
International Paper Company
Jersey City Medical Center
Johnson & Johnson
Lockheed Electronics Company, Inc.
Merck & Company, Incorporated
Mutual Benefit Life Insurance Company
New Jersey Allied Health Placement Service
New Jersey Bell Telephone Company
New Jersey Rehabilitation Hospital
New York Life Insurance Company
Pausin Manufacturing Company
Precision Resistor Company, Inc.
Prudential Insurance Company of America
Robert Burton Associates
Robie's Commuity Church Supply
Schering-Plough Corporation
Sears, Roebuck & Company
Servicemaster
Siemens Corporation
Theresa Grotto Center for Restorative Services
TRW Incorporated
United Parcel Service
United States Customs Service
United States Postal Service

New Jersey Rehabilitation Hospital
240 Central Avenue/East Orange, New Jersey 07018
Telephone (201) 673-1860
Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics, Inc.

Information for Readers and Contributors

The Journal, the official organ of the Medical Society of New Jersey is published monthly under the direction of the Committee on Publication. Released the first week of the month, a copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles*, based on research, original concepts relative to epidemiology of disease, and treatment methodology; *case reports*, based on unusual clinical experiences; *review articles; clinical notes*, succinct items on some aspect or new observation or technique of a case experience; and *special articles*, which may include evaluations, policy and position papers, and reviews of non-scientific subjects. Material submitted here is for exclusive publication in *The Journal*. Upon request of the author, the Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal*. The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal, MSNJ.*"

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten double-spaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editors. Authors must understand that the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data or special photographs).

Tables and Illustrations—Tables must be typewritten, double-spaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page—The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References, which should not exceed 35 citations except in review articles, should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed double-spaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus*.

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis*. New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Manuscript Review Board, who render an opinion to the Editor. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar may not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal*, MSNJ, 2 Princess Rd., Lawrenceville, N.J. 08648.

allergy unmasked

A NEW UNDERSTANDING

MULTIMEDIA CONTINUING EDUCATION PROGRAM



At last... A program that tells how new views on allergy can be used in daily practice

Nine international authorities discuss new views of allergy and developments that make diagnosis more precise, treatment more practical for all concerned physicians. Available *free of charge,* as a service to the medical profession from PHARMACIA Diagnostics, the complete program includes:

FILM (OR VIDEO CASSETTE) –
25-minute presentation relates new views on allergy through actual case histories.

COMPREHENSIVE PACKAGE –
Also supplied are moderator's guide, self-assessment tests, announcement posters, accreditation information. Present ALLERGY UNMASKED to colleagues, students, other health professionals at the time and place of your choice. For more detailed information, simply return the convenient coupon.

MONOGRAPH –
72-page illustrated text provides in-depth discussion of theory and application for home study.

PHARMACIA Diagnostics
Division of Pharmacia Inc.
800 Centennial Avenue,
Piscataway, NJ 08854



☐ Please provide more information on the ALLERGY UNMASKED Continuing Education Program.

☐ Please have a representative contact me.

Name (please print) _____

Title _____

Organization _____

Address _____

City _____

State _____ Zip _____

Pharmacia Diagnostics
Division of Pharmacia Inc.
800 Centennial Avenue
Piscataway, NJ 08854

Copyright © Pharmacia Inc. 1979

Pharmacia Diagnostics

9-0541M

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

Professional Liability Commentary*

Featuring: From the Defense—A Proper Perspective

FROM THE DEFENSE—A PROPER PERSPECTIVE

Paul X. McMenaman, Esq.**

I recently concluded defending a physician in one of the most ludicrous suits of my career. The physician, a friend for years, asked me if there had not been an injustice done to him. In essence, this physician was serving his appointed time on a ward with a resident and an intern under his supervision. A patient, who literally was dumped in the emergency room, was brought from I.C.U. on the third day after admission. He had a previous history of admissions for alcoholism and diabetes. The patient was provided with a proper workup, medicated, sedated, observed and placed in full body restraints. A friend smuggled in a razor with which the patient cut himself free, held off two security guards and, while brandishing the razor, jumped from the second floor window of his room. Although the physician had not yet seen the patient, he concurred with the diagnosis and treatment of the resident and intern.

The subsequent suit for personal injuries alleged medical negligence and deviation from accepted medical standards. The complaint charged abandonment and sought compensatory (make me whole) damages, and punitive (punish the doctor) damages. We undertook the defense of the three medical men. In our answer we denied negligence, asserted the patient brought his injuries upon himself, and in his complaint failed to state a cause of action for which relief could or should be granted. Thus, began a most frustrating attempt to exonerate these good physicians. Over the next *fourteen* months we properly utilized one discovery tool after another to try to ascertain what was the plaintiff's theory of liability.

We served six or more Notices to take the oral deposition of the plaintiff, but he consistently failed to appear at the appointed time and place. Each time we went to Court for relief, and each time it was ruled that the plaintiff would receive one last chance. Our demand that the plaintiff show us a written report by a medical expert in which medical negligence against any of the physicians was charged was ignored. All attempts at Court relief for failure to so produce were met with the constant ruling that the plaintiff be given more time to assemble his case against the physicians. In fact, had the Court wished to so rule, we could have been precluded from receiving a report until twenty days before the first trial date. (This, in fact, has happened in other cases). Answers to our questions, answered under oath by the plaintiff, were inconclusive and we obtained several different Court Orders compelling the plaintiff to submit more specific answers to them. Finally, a motion to dismiss was filed in behalf of the defendants after:

1. Plaintiff refused to submit to Court ordered physicial examinations
2. Plaintiff refused to submit to Court ordered oral depositions;
3. Plaintiff was unable to produce a medical expert;
4. Plaintiff was unable to submit a theory of liability;
5. Plaintiff was unable to submit more specific answers to our interrogatories.

Even then, only after three Court appearances, were we successful in having the case dismissed.

To reply to my friend's question, the entire system had worked to prolong a lawsuit against him causing a certain amount of anxiety, annoyance and embarrassment. To be sure, a litigant should and must receive every fair consideration. Our system works best for all combatants when it works unhurriedly, free of the emotions of the moment and the parties. However, reason and justice both dictate that there are certain kinds of charges that do not deserve to survive, indeed to thrive in the judicial system. It is perfectly obvious to me that a tenacious legal mechanism must be promulgated as soon as possible to protect the medical community from suits which are recognized by all fair-minded legal practitioners as baseless. The new subpanel *Rule 4:21* is a good start, but since its findings are not binding on the continuation of the litigation and since the Courts are intrinsically reluctant to preclude litigants, even a unanimous subpanel finding for a defendant-physician could find itself bound and gagged before a jury by the Court.

Malpractice is a big business with large dividends to a successful litigant and his attorney. Since money is the measuring stick, criteria, and reward all in one, it is the only relevant answer to baseless suits. Why not a new Court rule imposing costs on the losing party and his counsel? Why not special questions to the jury to determine the relative worth or nonworth of a particular allegation on a scale of ten, with costs for defending an allegation of five or more, assessed against litigant and lawyer alike? In a word, why not a proper perspective for the defense?

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

**Attorney associated with the firm of McMenaman, Grasso, and Orlovsky

DID YOU KNOW

. . . A report published in *Family Planning Perspectives* magazine states physician error was involved in 68 percent of 104 patient deaths during second trimester abortion in 1975-77.

Physician errors cited in the report were "failure to evacuate the products of conception completely and perforation of the uterus during the operation". (*AMA News* 1/25/80)

. . . The Dalkon Shield, the intrauterine contraceptive device manufactured by the A.H. Robins Company, now is the subject of 28 separate suits in which a total of $140 million in damages is sought. One $6.2 million judgment case was rendered in August last year." (*Malpractice Lifeline,* January 25, 1980)

. . . *National Law Journal* reports attorneys are beginning to attack the concept of state medical malpractice screening panels as an ineffective instrument in solving the malpractice problem. Lawyers have cited the following as partial evidence of the ineffective, dilatory, and inherent unfairness of the malpractice boards:

In Missouri: the successful challenge of the panels on constitutional grounds.

In Pennsylvania: only 14 hearings have been held of the nearly 3000 cases submitted since 1976.

In Florida: 72 decisions since 1976 have questioned the validity and effectiveness of the boards.

In Maryland: 315 of the 350 claims submitted since 1976 are still open (*New Jersey Law Journal,* Feb. 7, 1980).

PANEL HEARING SEMINAR

The Department of Professional Liability Control and the Administrative Office of the Court cooperatively have planned a program concerned with Rule 4:20—Panel Hearings for the MSNJ Annual Meeting in May.

On Saturday, May 10, 1980 at 10:00 a.m. to 11:30 a.m., James E. George, M.D., J.D., Director of the Department of Professional Liability Control, will moderate a panel of discussants on the topic "Rule 4:21:Panel Hearings—Where Are We?"

The panelists will be the Honorable Arthur J. Blake, Essex County Assignment Judge; James S. Todd, M.D., Chairman of the Board of Trustees, Medical Society of New Jersey and Chairman of the Board of Directors of the New Jersey State Medical Underwriters, Inc., and Mr. Bernard Genest, Director of the Claims Department of the New Jersey State Medical Underwriters, Inc. A question and answer period will follow the formal presentation.

CASE SURVEY

A seventy-five year old women fell from her chair at a nursing home while recuperating from a heart attack. She was taken to a local hospital's emergency room where x-rays revealed a Colles' fracture of the left wrist. An orthopedic surgeon was called to the emergency room. A short arm cast was applied and circulation precautions were given. He did not reduce or manipulate the fracture. The patient was seen by the orthopedist for an additional five office visits. While under his care the patient developed carpal tunnel syndrome, refused surgery and went to another physician for treatment.

A year and half from the time the physician last saw the patient she filed a claim alleging that the physician did not properly manipulate and reduce the fracture. The attorney advised that the patient's wrist was severely bowed and the front two fingers were contracted. The attorney further alleged that his client was unable to resume work.

The defense countered that the physician found the wrist bones to be "like a sack of pebbles and any attempt to pull or reduce the wrist would have resulted in the bones collapsing." The age of the patient, blood pressure of 156/102, and a recent heart attack, from which she was recuperating, were taken into account in the treatment of the patient.

The case was found defensible and the claim was dropped. **Further investigation revealed that the claim was initiated when the physician actively began to pursue payment of the delinquent account.** Generally suits or active participation by physicians to collect unpaid fees precipitate countersuits or initiate a claim by patients alleging malpractice. Many professional liability insurance companies advise physicians not to instigate collection of fees until after the expiration of the two-year Statute of Limitations closing date for professional services.

DEPARTMENT ACTIVITIES

Robert White, South Jersey Regional Director, Claims Department of the New Jersey State Underwriters, Inc. and A. Ronald Rouse, Assistant Director of the Department of Professional Liability Control joined James E. George, M.D., J.D., Director of the Department of Professional Liability Control as panelists in a recent medicolegal program for the Gloucester County Medical Society.

A medicolegal seminar requested by a specialist in Pediatrics and Obstetrics/Gynecology at Valley Hospital was conducted in March.

The Department is continuing to develop medicolegal video tapes for use at hospital staff meetings and hopes to have the tapes ready for distribution in early April.

A SEMINAR FOR DOCTORS BY U.S. TAX PLANNING CORPORATION
DISCUSSING LEGAL ALTERNATIVES TO I.R.S. 1041

The Bitter Pill To Swallow.



COMMON DOSAGE: 40%, 50%, 70%
OF YOUR EARNED INCOME

Description: Excessive tax payments in common dosage of 40%, 50%, even 70% of your income, reduce earnings and inhibit growth of personal wealth. A bitter pill to swallow.

Cause: Inequitable tax laws, complex reporting procedures, and intimidation by audit deter many high-percentage taxpayers from exercising their legal priviledges under current I.R.S. regulations.

Adverse Reactions: Findings include mild to severe depression, irritability and anxiety due to declining net worth and loss of income, resulting in hypersensitivity to sound financial planning.

Antidote: U.S. TAX PLANNING CORPORATION. A group of professionals dedicated to the task of assisting high-percentage taxpayers in keeping tax contributions to an absolute minimum.

Prescription: Attend the U.S.T.P.C. SEMINAR FOR DOCTORS on legal alternatives to crippling taxation. You will learn facts and tax procedures that can drastically improve the profitability of your private, group or corporate practice - and increase your net worth. Learn how to shield earnings from taxation and provide free tax dollars for capital appreciation. Discover the distinction between legal tax avoidance and tax evasion. See how you can defer, reduce or eliminate federal and state taxes - legally!

THIS SEMINAR DEALS WITH SPECIFIC DOLLAR-SAVING TECHNIQUES

Topics: These and more will be presented.
U.S. TAX LAWS • INFLATION • RECESSION • TRUSTS (FOREIGN AND DOMESTIC) • MALPRACTICE (SELF-INSURING) • LEVERAGED SHELTERS • LEASES •TAX-EXEMPT ORGANIZATIONS (501-3-C-CHURCH) • FOREIGN BANKING AND INVESTMENT • FUTURES • TAX PLANNING • OFF-SHORE TAX HAVENS • TRANSFER (INHERITANCE) LAW • INTERNATIONAL ESTATE PLANNING

WE GUARANTEE QUALITY AND CONTENT OF THIS SEMINAR • 100% REFUND

Faculty: MARVIN HELFRICH, J.D. Having earned a degree in Business Administration majoring in Economics and Accounting, and later a Doctorate in Law, Mr. Helfrich has an excellent background for understanding and implementing legal strategies in tax-planning. He is a practicing attorney specializing in tax problems of professional corporations.

JAMES G. BRYAN, Management Consultant and Founder of Doctors Management Consultants, Portland, Oregon, has served the medical/dental profession for many years. A teacher, lecturer, and economist, James Bryan earned his degree at the University of Oregon. He is a recognized authority on Off-Shore Tax Planning, Medical Malpractice Insurance and Tax Straddles.

CARL J. SAVIO, Financial Planning expert and President of Coordinated Professional Services, Philadelphia, Pa., specializes in International Estate Planning, Insurance Options and Tax Havens. An innovator, Savio combines his experience in International Tax Law, Accounting and Business Management to develop sound tax reduction plans for professionals and corporations.

Eligibility: Professionals, their spouse and/or office manager.

Seminar Fee: $95 for doctors (spouses/office managers free), includes continental breakfast. Fees are tax deductible.

Registration: In advance, by mail or phone. Confirmation by return mail upon receipt of check made payable to U.S. TAX PLANNING CORPORATION.

Cancellations: Full refund on cancellations received 48 hours prior to opening session.

Accomodations: If required, we will assist in reserving appropriate accomodations.

Mail To:
U.S. TAX PLANNING CORPORATION
Suite 2415 The Carlton House
Philadelphia, PA 19103 (215) 563-1939

☐ Sat., May 31, 1980 9 a.m. to 5 p.m.
Marriott Hotel Philadelphia, Phila., PA
☐ Sat., June 21, 1980 9 a.m. to 5 p.m.
Cherry Hill Hyatt House, Cherry Hill, NJ

Name: _____ No. attending: _____
Address: _____
_____ Zip: _____
Telephone: _____

For Reservations and/or Information call 1 800 543-3000, Operator 220

U.S. TAX PLANNING CORPORATION

IT'S HIGHLY RECOMMENDED... AND FOR GOOD REASONS



1. provides broad-spectrum, overlapping antibacterial effectiveness against common susceptible pathogens, including staph and strep
2. helps prevent topical infections, and treats those that have already started
3. it's good medicine for abrasions, lacerations, open wounds, primary pyodermas, secondarily infected dermatoses; and it's painless and cosmetically pleasing
4. contains three antibiotics that are rarely used systemically
5. you can recommend it in any of the three convenient package sizes: 1 oz tube, ½ oz tube, or the versatile, single-use foil packet



selected by NASA for the Apollo and Skylab missions

NEOSPORIN® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs, in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

ONE HUNDRED YEARS WELLCOME

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

EDITORIALS

Second Surgical Opinion No Solution For Judgment

In 1974 Eugene McCarthy, Ph.D., published his work on "unnecessary surgery" in which he concluded that, upon obtaining a second opinion, 24 percent of all procedures recommended were not confirmed as necessary.[1] Since then, the government, the media, and the public advocates have been unrelenting in their push for second surgical opinions as a mandatory requirement of insurance coverage and as a way of reducing health care costs. Now the United States Department of Health, Education and Welfare is launching another nationwide campaign at taxpayers' expense to use second opinion programs. In our state, Governor Byrne, in January, signed legislation requiring insurance companies to pay for second opinions prior to surgery.

All of this has produced heated controversy, but also some discernible facts that need to be considered. Second opinions have implications which may influence both the quality and the cost of health care. In reaching a therapeutic decision, physicians need to look at both aspects, but it is unlikely that anyone would subscribe to a reduction in quality for economic reasons.

Objective studies of second opinion programs have reached the conclusion that when all variables are considered, less than eight percent of recommendations for surgery were unconfirmed among a large series in New York City.[2] Indeed, when specific procedures were reviewed, the unconfirmed rate dropped to less than one percent.[3] According to Dr. McCarthy's latest figures, 37 percent of those patients not confirmed as needing surgery did indeed have the procedure.[4] Of those who were not confirmed and who did not undergo surgery, at least one-third continued under medical care, leaving only seven percent of the nonconfirmed group no longer requiring medical care. More startling was the finding that 15 percent of those confirmed for operation chose not to undergo the operation; this raises serious questions as to a significant adverse influence of second surgical opinion on those needing surgery.

Recognizing that second opinion programs are predicated upon the strict acceptance of the consultant's judgment and that there is a great variability in surgical practices and indications, Zuidema studied the reproducibility of opinion through a randomized survey of surgical specialists.[5] He found that surgical judgment legitimately differs to a major degree from one surgeon to another and was unrelated to educational, financial or organizational factors. Surgical decision making is a semi-exact science, so it is unreasonable to expect exact answers to clinical problems.

Economically, great claims have been made for reducing costs in second opinion programs. Only about one to two percent of patients eligible to elect to receive second opinions do so. New Jersey Blue Shield which sponsors the nation's third largest voluntary second opinion program reported (after twenty-five months into the program) estimated savings of $303,857 from procedures not performed. Since the program cost $130,825 to administer, the net savings were only $173,032. Considering that 1,043,100 people were eligible, it is difficult to conclude any great economic advantage to the program.

Obviously, the final answer is not in, nor may it ever be. All that can be said with certainty is that the demand for second opinions by the public is low, the incidence of nonconfirmation is considerably less than initially thought, the variability of surgical opinions is a natural consequence of an inexact science, a significant number of patients defer surgery despite two concurring opinions, an even more significant number of patients elected to have surgery when opinions conflict, and no one yet has proved either improved quality care or economic advantages with second surgical opinions' programs.

The medical profession would do well to stand on its long-held tradition of consultation when indicated in the best interests of the patient or in difficult cases. The cost to the patient for consultation should be underwritten, but the imposition of mandatory consultation, or restrictive reimbursement procedures should be resisted stoutly as unnecessary at best and, at worst, punitive to the patient. Until such time as individuals conform to molds, there will be diversity in opinion as to how best to care for them. Acknowledging the need for vigilance, the profession should not be diverted by such annoyances as second surgical opinion programs, but should continue its quest for quality care for all at a cost all can afford.

James S. Todd, M.D.*

REFERENCES

1. McCarthy EG, Widmer GW: Effects of screening by consultants on recommended elective surgical procedures. *N Engl J Med* 291:1331-1335, 1974.
2. Paris M, Salsberg E, Berenson L: An analysis of nonconfirmation rates: Experiences of a surgical second opinion program. *JAMA* 242:2424-2427, 1979.
3. Emerson R: Unjustified surgery: Fact or myth. *NY State J Med* 76:454-460, 1976.
4. Grafe WR, McSherry CK, Finkel ML, McCarthy EG: The elective surgery second opinion program. *Ann Surg* 188:323-330, 1978. (Presentation before American Surgical Association, April 1978.)
5. Rutkow IM, Gittelsohn AM, Zuidema GD: Surgical decision making: The reliability of clinical judgment. *Ann Surg* 190:409-419, September 1979.

*Dr. Todd, who is Chairman of the Board of Trustees of MSNJ, is a member of the surgical staff at the Valley Hospital in Ridgewood.

When Politicians Play Doctor

When politicians play doctor, they have the potential for creating decisional miscarriages of megaton proportions. In recent times, three examples of such transgressions have come to light:

1. Mohammed Riza Pahlavi's diagnosis and treatment
2. Organ transplant without family permission
3. Capital punishment by physicians

Propriety would imply that the Congress, state legislatures, and representatives of the executive and legislative branches of government would leave no stone unturned in seeking and utilizing quality advice on medical and health matters which entail regulatory and jurisprudential decisions. The facts of life, however, demonstrate a contrary state. Witness, for example, the swine influenza vaccine issue and the abortion and Laetrile fiascos. Here, political expediency seemed to bump aside the application of common sense when the admixture of emotions and self-service entered the scene.

THE SHAH'S DIAGNOSIS AND TREATMENT

Even in the absence of a medical student's history and physical examination—and despite national pride and self-confidence— there probably is no American physician who has felt that the former Shah of Iran had to come to the New York Hospital-Memorial Sloan-Kettering Cancer Center for diagnosis and treatment that could not have been rendered adequately in Mexico or any one of many less politically sensitive western medical centers. The "humanity" excuse seemed patently transparent to most of us.

Reports which were leaked or filtered out over time suggested that political motivation—too complex and too pervasive at the highest levels to disclose to the public—was the moving force which transposed Pahlavi from Cuernavaca to New York. It seems that Benjamin H. Kean, chief of tropical medicine at New York Hospital, a pathologist, was dispatched to examine the Shah. Whether Kean made a flawed diagnosis—or the diagnosis was deliberately distorted —is not known, but it seems clear that the Shah himself was less than candid with his medical consultants about his lymphoma.[1]

Taking all the factors into consideration, one must not condone the criminal acts of so-called Iranian "students" aided and abetted by politically naive religious fanatics and their hangers-on, by blaming the sequence of illegal events on the bad judgment of *our* leaders and their advisors. Nevertheless, bad advice and unwise decisions, wrapped around a medical problem, did lead us into a degrading situation which will prove forever an embarrassing chapter in modern American political and medical history.

ORGAN TRANSPLANTATION

A recent front page article, date-lined Jerusalem, told a tragic story of the Israel-Arab conflict with a medical twist and an underlying law of unacceptable proportions. It seems that a 23-year-old Jewish male immigrant from Denmark settled in the occupied West Bank near the city of Hebron. While walking through the alleys of the market in that city, he was mortally wounded by two shots in the head from the gun of a member of the radical faction of the Palestine Liberation Army. His death seemed inevitable to the Hadassah Medical Center physicians, who assumed his care after a helicopter flight to their institution. When his death became imminent, the physicians selected a patient from their dialysis unit as a kidney transplant recipient, based on tissue matching. The assignee turned out to be a 12-year-old Arab girl, a P.L.O. disciple whose anti-Jewish diatribes were well-known to the hospital nurses.

A furor arose among some members of the Israeli Parliament—particularly the ultra-orthodox group—when the facts of the transplant were made known.[2] The obvious tragedy—the loss of the life of the young man—was a double disaster for the family of the murder victim because they had no say in the question of his organ donation.

The Israel law, it seems, respects neither the antemortem wishes of the donor nor the surviving relatives, but permits the state to assume control of the matter irrespective of the presumed human rights of self-determination in such matters.

CAPITAL PUNISHMENT BY DRUG INJECTION

Four states—Oklahoma, Texas, Idaho and New Mexico—are soon to be joined by a fifth, Florida, in the legalization of capital punishment by drug injection. The laws provide "that a lethal dose of a drug will be prepared, administered, and monitored by medically trained personnel." While the laws do not actually require a *physician* personally to administer the drug directly into the prisoner's body, he is intimately involved in the execution procedure. According to Curran and Casscells, the physician's participation can range from "ordering the substance and preparing it for injection, to injecting the substance or ordering and supervising the injection by other medical personnel, to monitoring administration and observing the prisoner throughout the continuous injection of the drug and examining the prisoner and pronouncing his death."[3]

This is no small matter because a large number of prisoners are subject to capital punishment—140 in Florida and 119 in Texas—and this method could be used for all.

Why death by drug injection rather than by hanging, firing squad, electrocution, lethal gas, the guillotine, or other "tried and true" techniques of the past and present? The new laws are said to "(1) result in less painful and more humane treatment for the condemned prisoner; (2) encourage juries to vote the death penalty; (3) be less likely than laws providing for other methods of execution to be struck down by courts as 'cruel and unusual punishment'; and (4) be less expensive than death by electrocution or lethal gas."[3]

Do these reasons speak for themselves?

These are not isolated instances of government employees or representatives, politicians and other non-physicians who have created and are still creating intolerable transgressions against human rights in the name of humanity. Fortunately, we are not aware of all of them or we all would suffer from malignant hypertension.

Consider the near-idiocy of the Army personnel who aerosolized *Serratia marcescens* in the San Francisco Bay area in what euphemistically was called "feigned germ warfare" in 1950.[4] The environmental contamination of the Bikini atolls with underwater and mid-air explosions of atomic bombs also has to rank as an official decision with catastrophic consequences.[5]

In World War II the Nazis had physicians participate in direct and indirect genocide on a scale so unimaginable as to dwarf the potential of the entire capital punishment program in the United States. Yet it becomes a matter of degree, i.e., whether one plays an active role in the death of one person or a thousand people, it is the same transgression.

A FABLE

The three issues discussed above permit one's imagination to create an interesting possibility. Suppose the enlightened legislators of the great State of Texas decided to add a law like the one in Israel permitting organ removal and transplantation without family concurrence. And, suppose a nameless dictator from another nation found himself in a medical center in Texas with a deteriorating state of health which threatened to take his life unless he received a heart transplant. And further suppose that some United States Senators or Congressmen and industrialists and others owed this anonymous dictator a few favors. There happened to be in "death row" a healthy young male prisoner awaiting implementation of his death sentence. Would it not be convenient to set up an operating room next to "death row" and have one physician, on orders from the Governor of Texas, terminate the life of the young prisoner in a "humane manner"—but only after his heart was removed for immediate placement in the dictator in the adjacent operating suite? Far-fetched? Yes! Impossible? Not at all.

It is hard to imagine any physician who has taken a "doctor's oath" who would participate in the capital punishment of prisoners. Virtually every oath, whether it be that of Hippocrates, or the Christian, Arabic, Indian, or Montpellier-Glasgow variations, contains a modification of the following:

"I will not give poison to anyone though asked to do so, nor will I suggest such a plan."

In the name of humanity and research, every manner of outrageous behavior is possible. Physicians must be aware of them and cry out against them in a single voice which is both loud and clear. If killing human beings is a government-decreed form of punishment, let government agents carry out the punishment. Physicians should not particpate in such programs and they should oppose the control of an individual's mortal remains by state agents—for transplantation or any other purpose—without the consent of surviving relatives. A.K.

REFERENCES

[1]Bloom M: The Pahlavi problem: A superficial diagnosis brought the Shah into the United States. *Science* 207:282-287, January 1980.

[2]Shipler DK: Transplant kidney from Jew to Arab girl causes furor in Israel. *New York Times*, February 8, 1980.

[3]Curran WJ and Casscells W: The ethics of medical particpation in capital punishment by intravenous drug injection. *N Engl J Med* 202:226-230, February 1980.

[4]Cooper R and Mills J: Serratia endocarditis. *Arch Intern Med* 140:199-202, February 1980.

[5]Krosnick A: Bikini atoll: A footnote to history. *J Med Soc NJ* 71:777-779, October 1974.

Pushbutton Interns

We medical educators are witnessing a very dangerous cultural trait in the young American physician which in part can be attributed to the life style of today's children. Characteristically, the youth of today have unbelievable conveniences, all of which promote a "pushbutton" life style of little movement and yet a good deal of activity—much like our new television sets. Young, talented physicians brought up in present-day society are conditioned to push a button and, like a TV channel changes, to see everything happen perfectly—doors open, the library research computer prints out references, and so on. Similarly, an intern of today carries this philosophy into his "internship" (PGY-1).

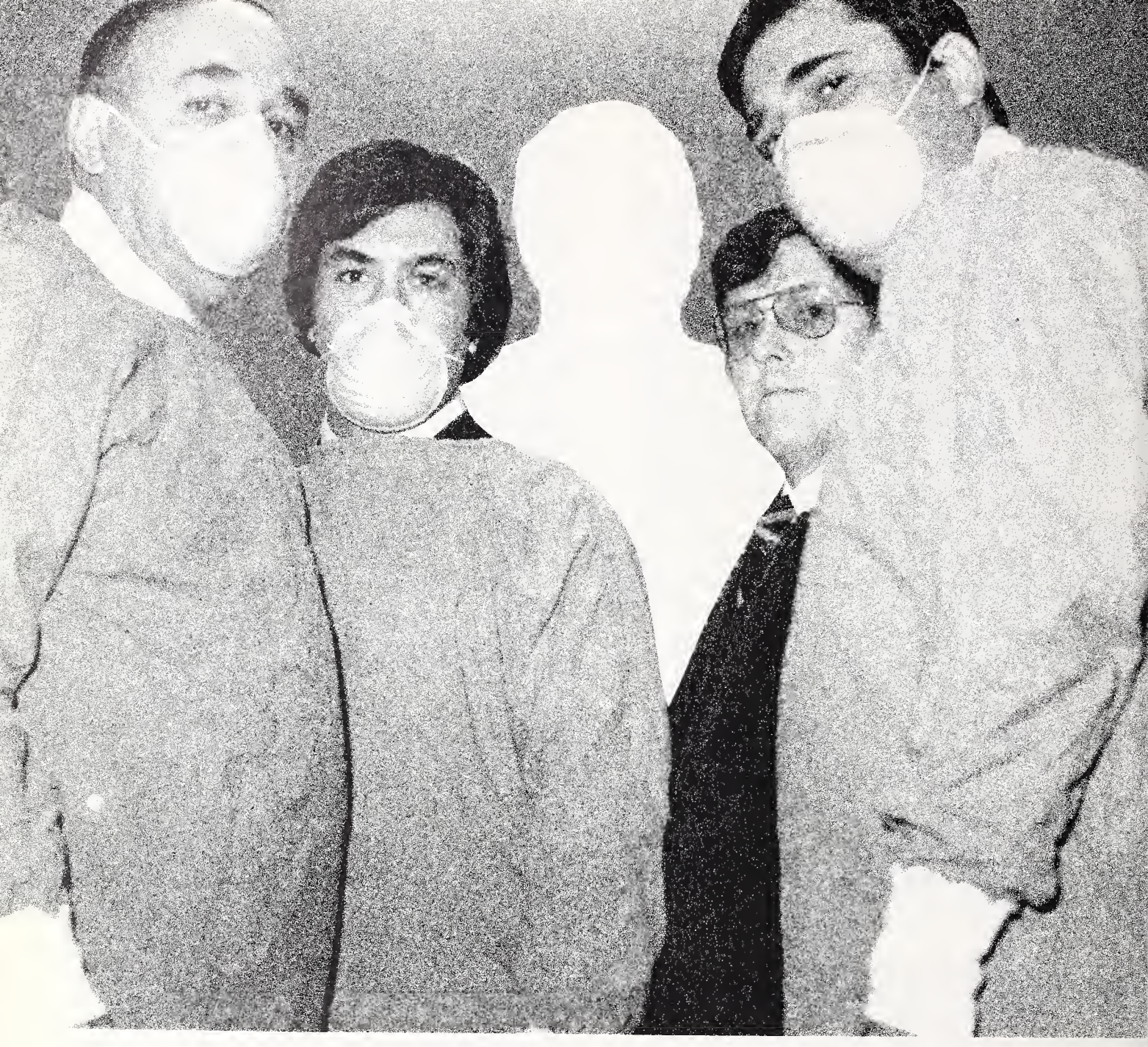
In previous years, the intern was "low man on the totem pole" and personally performed many of the routine or emergency tests such as the gram stain of specimens, urinalysis and peripheral blood smear. Today's intern merely writes the orders and expects the other "troops"—nurses and technicians—to carry out the duties which in former days were delegated to the intern. By so doing he encourages the potential development of a number of dangerous situations. Naturally, as one removes oneself farther from the patient by the so-called "scientific approach," much of the motivation and proper inner controls are lost. Hence specimens may be delayed in reaching the laboratory, resulting in a false positive rapid bacterial growth and a false interpretion of a colony count leading to unnecessary treatment. Gram stains are not performed as assiduously on specimens from patients with pneumonia, but repeated therapeutic trials of antibiotics are substituted.

Laboratory technicians, with no real interest in the individual patient, report "QNS" (quantity not sufficient) for a spinal fluid analysis of enormous importance. False positive blood cultures are obtained by inexperienced interns who are accustomed to having others do their procedures.

Thus the intern is prepared improperly to handle even basic techniques necessary for proper clinical management. The scenario continues with unending anecdotes of poor medicine, not attributable to a bad conscience or lack of interest but due to childhood conditioning.

We must return to the basics. Each intern should be observed as he performs simple procedures that every physician must know. Furthermore, all specimens for laboratory study should be handled by the intern who then can get the technicians personally involved in the patients. Proper histories could be given to the technicians, and data can be verified and proper interpretation can be made. It is time to reverse the trends of the "QNS and sink test," non-involved technician and the well-educated but "pushbutton" intern.

Leon G. Smith, M.D.



Four out of five doctors participate!

If you're that one-out-of-fiver, a non-participating doctor, it's quite probable you haven't talked with a Blue Shield representative in a long while.

It's likely you're not familiar with our newer fixed-fee program, Series 14/20.

Why not let one of our professional relations representatives bring you up to date – call (201) 456-3250 to arrange an appointment.

Give your patients the benefit of the best.

Blue Shield
of New Jersey

COMMENTARY

For many years, physicians have been ambivalent in their reaction to the socioeconomic problems surrounding medical care. They frequently have reacted only in response to those political thrusts that have appeared most important to them, particularly those principles directly related to the practice of medicine. If physicians wish to continue to enjoy the private practice of medicine, they must become actively involved in directing medicine's future.

Governmental and legislative demands concerning the costs of health care have been in the headlines on a daily basis. The battle ahead is not just for the image of medicine or for the physician's income. At greatest risk is the ability to practice medicine in accordance with best medical judgment, and the patient's best interest.

No program yet promoted by government or insurance carriers has had, as its primary goal, improving the quality of medical care. Rather, we are faced with economic guidelines passed down by bureaucrats. The public does not have faith in regulation by government, but people are shocked by rising medical costs and are seeking alternatives.

There is fear and resentment over rising costs and patients are becoming more vocal and skilled in expressing their unhappiness with the cost of medical care. Ringing denunciation of the high cost of medical care is splendid grist for the political mill but provides nothing beneficial for the public or their health.

Nonetheless, the demand for high-quality medical care and unlimited access to the fruits of medical progress dictate that costs will continue to spiral upward. With voluntary effort, physicians and hospitals may slow the rise in hospital costs through efficiency and may provide a partial solution. But cost containment should not result in the denial of necessary services. The allocation of medical services involves complex medical decisions.

We are confronted with increasingly complex issues in New Jersey and nationwide: new terminology, manpower needs, HMO/IPA, certificate of need, recertification, second opinion, and unnecessary surgery. Yet there are encouraging signs. In between the bold headlines, one sees that the patient's opinion of his own physician remains extremely high. Costly and unproved programs are not being met with acceptance. Medicine continues to provide high-quality care and wider access.

Socialized medicine in those countries with political systems closest to ours, such as Canada, England and Australia, is facing increasing difficulties. While health legislation received a great amount of attention in recent years, we are seeing greater recognition of the limitations and failures of government performance, of the fraud and waste in government programs, and of the gap between political promises and accomplishment. The electorate calls for less government regulation and greater government accountability.

In this year of health cost containment, the social, economic and clinical dimensions of cost control have produced new ethical questions, which affect the physician and patient. To some extent, attention has been focused sharply on cost because national goals with respect to quality, and of access to health care, have been met or exceeded. Effects of regulation of hospital and physician, the nature of the market for physicians' services, and the supply of physician manpower are all complex issues.

Compromise on the many controversial issues facing medicine is not always possible. The best interest of the patient well may coincide with the best interests of the physician.

Stuart A. Hirsch, M.D.

*Opening remarks by Stuart A. Hirsch, M.D., Chairman of the Section on Orthopaedic Surgery, at the symposium on "Trends in Modern Medicine," presented before the joint session of the Sections on Orthopaedic Surgery and Medicine, 213th Annual Meeting of the Medical Society of New Jersey, May 14, 1979, Atlantic City.

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D., R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android® /5 mg. Buccal /10 mg. Oral /25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Zeal Without Understanding: Federal Intervention in Medicine

JOHN J. GARTLAND, M.D., Philadelphia

Legislated right to health care coupled with escalating federal financial involvement results in increasing federal intervention in medicine. Well-meaning, but lacking understanding of quality health care, the federal zealot antagonizes medicine. To succeed against federal intervention, doctors must forego self-interest, keep patient support and speak with a unified voice.

A reasonably happy marriage of convenience existed between the government and American medicine for almost two decades following the close of World War II. Not all of American medicine, of course, was involved, but certainly the academic, research, and training arms of medicine were richly and amply rewarded by government funding. This was the era of the supposed doctor shortage and the government responded with millions of dollars to start new medical schools and encourage enrollment increases in old medical schools. Vast sums of money were allotted for biomedical research and for medical training grants. The average practicing physician, during these years, had little awareness of government interference in his affairs because the delivery of health care had not yet surfaced as a compelling public issue.

Disenchantment of both the public and the government with the results of vast expenditures of money for medical research in the last two decades arose for two reasons. The exotic research advances were applicable to only a few patients while the profile of other advances was so low that the public was unaware of them. During this same time, the public became dissatisfied with both availability of health services on their terms and its cost. This dissatisfaction was conveyed to the government, which already was dissatisfied with rising costs; the result was a shift in financial support, to a considerable extent, to the delivery of health care.

CONGRESSIONAL LEGISLATION

When Congress passed legislation which essentially established health care as a right, the Federal government was at once committed to provide health care to the ineligible and others via existing or new channels. When Congress provided for Medicare and Medicaid in 1965, great expectations, coupled with over-commitment, were almost surely inevitable. As a result actual cost exceeded estimates. The Federal government in most contracts tends to exercise some sort of control regarding quality in the products or services for which it pays. Medicare and Medicaid which involved a large number of purveyors and recipients and vast numbers of episodes of medical care, offered the government the opportunity for direct intervention into the process of health care delivery. Reasonably convincing arguments can be raised to support both sides of the resulting controversy, but the net effect, at least from organized medicine's standpoint, has been escalating hostility toward Federal intervention.

GOVERNMENT INTERVENTION

Make no mistake about it, a forceful government drive is underway to restructure the practice of medicine. Increasing

*Read before the joint session of the Sections on Orthopedic Surgery and Family Practice, 213th annual meeting of the Medical Society of New Jersey, May 14, 1979, Atlantic City. Dr. Gartland is President of the American Academy of Orthopedic Surgeons and may be addressed at 1025 Walnut Street, Philadelphia 19107.

"Make no mistake about it, a forceful government drive is underway to restructure the practice of medicine. Increasing government interference and regulation in our professional lives can be anticipated."

government interference and regulation in our professional lives can be anticipated. The next few years well might be the time to try men's souls as far as medicine is concerned. Neither you nor I any longer can afford to be spectators in this compelling challenge of our times. If we wish medicine to remain a bastion of individual enterprise in this country, our leaders must cooperate with the government to solve some of the inequities in the current system of medical care. No one is going to benefit if physicians remain at odds with industry, labor and the government bureaucracy. If you and I are to have a sensible national health policy, lines of communication between these important groups must be improved. The balance of power, however, cannot be vested in any one group, least of all the Federal bureaucracy that answers to no one and will presume a plan for all unless controlled. When we think about and discuss Federal intervention in medicine, we should consider the warning of Justice Brandeis: "Experience should teach us to be most on our guard when the government's purposes are beneficient. The greatest dangers to liberty lurk in insidious encroachment of men of zeal—well meaning, but without understanding."

That Justice Brandeis was correct is easily shown by dealings with the medical profession. Such philosophic and intellectual concepts as ethics and surgical judgment, accepted by physicians without question, are totally ignored in most discussions on health care with bureaucrats. Medical licensure, specialty board certification, and medical society memberships, which medicine long has regarded as good in order to protect the public from unqualified practitioners and to help provide for high-quality health care, are viewed by the Federal Trade Commission (FTC) as anti-competitive. The FTC holds the curious view that all who wish to practice medicine should practice medicine without screens since this then would flood the marketplace with purveyors of care and hence drive health care costs down.

The U.S. Department of Health, Education and Welfare (DHEW) finds itself in sharp disagreement with another Federal agency, the Federal Trade Commission, over points upon which to attack medicine. The FTC, for example, views physician fee schedules as markedly anti-competitive. HEW, on the other hand, fully intends to include physician fee schedules in all its future health proposals. Clearly, the Federal bureaucrat, as far as medicine is concerned, is a zealot without understanding. The adversary position that now exists between government bureaucrats and physicians induces and perpetuates the mistrust now so publicly evident on both sides.

It is time that we in medicine stop being defensive and go on the offensive to preserve the present medical care system which is the best in the world and which emphasizes voluntary problem solving by the private sector. If we do not take the initiative in this matter, it will be assumed by others and we may have no input in the ultimate resolution of this

"(DHEW) finds itself in sharp disagreement with another Federal agency, the Federal Trade Commission, over points upon which to attack medicine."

challenge to our health care system. In matters pertaining to the public welfare, the Federal government will intervene when no one else can or will satisfy a perceived need. Before speaking with a unified voice, however, we must be certain that our proposed initiatives relate to real national needs and are free of the taint of parochialism and studied self interest.

HEALTH COSTS

The current attack on physicians has come largely out of the crisis in health costs. At present it is the cost issue that tears at the vitals of the whole medical care system. It is escalating the confrontation between agencies of government, those who practice medicine, and the hospitals in which we work. Clearly, the containment of health care cost is seen by the economic community, the government and the general public as an idea whose time has come.

To put this issue in perspective, I remind you that in 1933, the Commission on the Cost of Medical Care issued a report which stated, in part, "We know how to do many things which we fail to do, or do in an incomplete or a most unsatisfactory manner. As a result of our failure to utilize fully the results of our scientific research, the people are not getting the service which they need. First, because in many cases the cost is beyond their reach; and second, because in many parts of the country, it is not available. The cost of medical care has been the subject of much complaint."

A POLITICAL ISSUE

Problems relating to the cost, distribution and control of the quality of medical care which were identified 46 years ago and some of which we have been solving with reasonable success suddenly have been recognized by politicians as issues of considerable political substance. We can expect to see national proposals and regulations which, in the name of cost containment, will impact on the patient-physician relationship, infringe on patient's and physician's rights and, if past history is a judge, result in sacrificing quality or access to medical care or both. In its desire for quick improvement, society through its legislators, will be tempted to seek well-meaning but premature and incomplete laws and regulations based on medical data and testimony that most of us would

". . . the cost issue . . . is escalating the confrontation between agencies of government, those who practice medicine, and the hospitals in which we work."

"The current course which medicine is taking toward greater regulation, greater restriction, and cookbook medicine can and should be reversed."

find unconvincing. We can expect to be smothered with oppressive regulations which will complicate the process of patient care without improving it.

The federal zealot is most anxious to regulate medicine because he perceives public health as a political issue. Unfortunately, he desires to intervene in an area for which he has almost no understanding. He is puzzled because the so-called health care industry does not comfortably fit into any economic model which he or his economic advisors can devise. He does not understand the concept of medical ethics, clinical judgment, surgical judgment, and physician-patient rapport and hence, disregards them. It is up to you and me, as patient advocates, to supply that understanding.

Our system needs to be improved and it is our obligation to better it, and we had best be about it immediately. You, the doctor, are the most effective public relations person for medicine I can imagine, and it is your voice that needs to be heard in Washington. Your wisdom, honesty, dedication, integrity and sound clinical judgment could preserve national public support for the maintenance of the present medical care system which you and I sincerely believe best serves the American public. If we lose national public support, we have lost the battle. We must rally national public support to our cause and use that support to convince the zealots that massive Federal intervention in medicine does not serve the American public.

Legislative proposals and laws do not arise *de novo* from some collective faceless body. Legislation arises from ideas and proposals of individuals. The Health Manpower legislation introduced by Senator Edward Kennedy in 1975, which contained regulatory provisions for medical education in medical schools and residencies, for medical licensure and relicensure, and for geographic and specialty distribution of physicians, was developed almost entirely from proposals made to Senator Kennedy, or his staff, by individual physicians or by some group representing physicians. These restrictive and regulatory provisions were proposed by physicians, not by the Senator or his staff. If you and I do not speak now, people of that ilk will continue without opposition to encourage the zealots on their collision course with medicine.

The current course which medicine is taking toward greater regulation, greater restriction, and cookbook medicine can and should be reversed. Legislation which serves no useful social function or has unforeseen adverse effects on society and individuals can be repealed or amended when evidence is developed and presented to the public and the legislators who represent the public. In my opening paragraph I spoke of a marriage of convenience between medicine and the government in the 1950's. Forgive another reference to the marriage ceremony, but I must say to you, "Speak now or forever hold your peace."

"A FLIGHT OF FANCY"

A delightful parody by Dr. Robert B. Howard, entitled "A Flight of Fancy," represents the ultimate in zeal without understanding:

"Flying an aircraft is much too serious a business to be left to the pilot. For far too long, pilots have enjoyed a kind of mystique which has permitted them to dominate the flight-care system in an unconscionable fashion. It is high time that we flight-care consumers asserted our fundamental rights.

"I am tired of having the pilot tell me when I can board an aircraft, when I must buckle my seatbelt, at what altitude we will fly, and other comparable aspects of my flight-care consumption. The pilot, after all, is only one member of a flight-care team that also includes ticket sellers, boarding area personnel, cabin attendants, navigators, and copilots. The views of all of these people, experts in their respective fields, should be taken into consideration when flight care is being planned and executed. Obviously, the interests of the consumers must also be respected.

"I suggest that what we need in the United States is a massive restructuring of the flight-care system that will free us of this unhealthy dominance by pilots, all of whom make too much money anyway. I believe that as every flight is about to depart, an appropriate Flight-Care Council should be formed. It would, of course, include the pilot, whose technical expertise is undeniably required. The council would also include among its members appropriate representatives of the ground crew and the flight crew. The majority of the members, however, should be flight-care consumers, chosen on the basis of a careful consideration of the sexual, ethnic, and religious makeup of the consumer group on the flight in question.

"The Flight-Care Council would be responsible for making key policy decisions with respect to the flight, including the time of take-off, the altitude at which the aircraft would fly, where the flight would stop along the way, and the ultimate destination.

"After the landing, an Airstrip Utilization Review Committee would make a determination of whether the landing was indeed necessary. In the event that it is deemed to have been unnecessary, the pilot would be forced to take off again.

"I urge that our lawmakers speedily enact appropriate legislation that will bring about these long overdue changes in the flight-care system and bring an end to the pilot tyranny that has resulted in maldistribution of flight-care service, unnecessary flights, and lack of attention to the real needs of consumers."

In closing, I urge you to remain sharply aware of the federal zealot who is attempting to intervene in your affairs without really understanding you or your deep commitment to quality health care in our country. To be successful in our coming battle against Federal intervention in medicine, we must forego self interest, rally our patients to our support, and speak with a unified voice.

Medical Malpractice Insurance*

THE HONORABLE JAMES J. SHEERAN, Trenton

The market for medical malpractice insurance, recently plagued by crises of availability and increasing costs that had been created by a lack of competition, has been stabilized by innovative programs by the State and by medical and hospital professional groups. Now insurance is readily available and costs are coming down amid signs of a healthy revival of competition among the companies.

Until only a few years ago professional liability (malpractice) insurance was hardly a matter of concern for the doctor, the insurance companies, or the regulators of the insurance companies. The insurance was available, generally through one's professional society, and it was relatively inexpensive. But beginning about 1974 and continuing into 1977, there was a radical turnabout in the malpractice insurance market. Insurance became hard to get and rates rose astronomically. Doctors understandably became concerned that they would find themselves with inadequate coverage or even no coverage at all. Today, we've come full circle. The marketplace is untroubled; insurance is available and most premiums have come down or have become stabilized.

BACKGROUND

I would like to sketch in some of the background of this malpractice insurance phenomenon so that you may understand more fully the role of the insurance regulator, who alternately is condemned as an ogre and hailed as a savior, depending on the state of the marketplace at any one time. From the beginning, it was apparent to me that the malpractice insurance market suffered from a lack of competition of the kind that we have a right to expect from insurance companies. I found that, in one jurisdiction after another, there was a particular carrier that dominated the field for a particular line of professional liability insurance, with only a relatively small amount of the business left to other insurance companies. This condition came about, I soon realized, because of the agreements that various professional organizations had executed with insurance companies. Well-intentioned as they were, (and their purpose was to make sure that members of the professional organization were able to obtain coverage), nevertheless, these agreements had the unfortunate consequence of promoting an aura of monopoly in the marketplace.

In this atmosphere of non-competition, which prevailed across the country, the companies holding exclusive agreements with professional societies were in a position to bludgeon regulatory authorities into approving rate increases, or changes in policy forms, or methods of doing business under the threat of pulling out because no other authorized company was willing to step in and pick up the coverage at a reasonable rate. The regulator not only was subjected to pressure from the companies but he also got it from the professionals themselves who, afraid to go "bare," were quite willing to pay just about anything to make sure they had the required coverage.

Let me cite a couple of examples:

*Read before the joint session of the Sections on Orthopedic Surgery and Family Practice, 213th Annual Meeting of the Medical Society of New Jersey, May 14, 1979, Atlantic City. Mr. Sheeran is Commissioner of the New Jersey Department of Insurance. He may be addressed at that department, 201 East State Street, Trenton, New Jersey 08625.

I had a crisis in medical malpractice insurance develop when the carrier supplying umbrella coverage to the doctors announced that it no longer would write that line of insurance. Despite pressure from physicians' organizations, I initially refused to approve a rate filing by another company willing to pick up the umbrella coverage at an inflated rate. Instead, I suggested the company submit a new filing to eliminate such benefactions as a profit provision in the rates and certain favorable ways of computing the cost of certain administrative functions. Subsequently, the company did make an amended filing to meet my objections and I approved a rate schedule that saved the doctors about $300,000 in annual premium.

HOSPITAL INSURANCE

A couple of years ago the carrier for members of the New Jersey Hospital Association announced that it was going to cancel the insurance of 29 of the hospitals it insured. At the same time, it asked for a 410 percent increase. I regarded that rate filing as a particularly insolent gesture but that was nothing compared to the arrogance exhibited when I got curious about certain statistical data submitted by the company and announced an investigation. The company's response was simply to withdraw its rate filing and announce it was going to get out of the malpractice business in New Jersey altogether. That is what I mean by the harmful effects of monopoly.

A major problem that gave me considerable reason for viewing with some circumspection the various rate filings I received was the lack of adequate data offered by the companies. In their statements for public consumption, the companies hinted darkly at the proliferation of huge verdicts and settlements, and made baleful predictions of what lay ahead for them. Yet, in the filings I received, I frequently had to look in vain for the statistical data that should be the basis for requests for increases.

A couple of years ago, when the insurance companies were coming in with these out-of-the-world filings, the highest award I could uncover in a medical malpractice case in New Jersey was only about $300,000. In the umbrella coverage episode I referred to earlier, the only loss I could find by the company was a *two-dollar payout*. I never did figure out what that was all about.

The problem stemming from lack of data frequently is exacerbated by reports appearing in the media that tell of huge malpractice verdicts or settlements. These reports might stampede an unwary regulator into approving rate increases willy-nilly, but they are not always what they seem.

A couple of years ago, I noticed a story in the press, which told of a settlement in the case of a grievously-injured infant that was supposed to be for approximately $2.6 million. Such an amount could prove to be an enormous drain on one company's resources. Curious, I asked the company for a detailed description of the settlement. The settlement proved to be a structured one. It involved an immediate cash payment of $295,000 for certain expenses, past and future, establishment of a trust fund to yield $30,000 a year for the rest of the child's life with a minimum of ten years of payments, and payment of $175,000 in attorney's fees. The total settlement actually cost the company an outlay of about $850,000 with the $400,000 corpus of the trust fund eventually to be returned to the company. So the settlement, which could reach 2.6 or more millions of dollars if the child lives long enough, certainly will not have the impact on the company's resources—and thus build a case for higher rates —if $2.6 million had to be paid out in one lump sum.

I have learned to be wary of losses claimed.

The incident involving the hospitals' insurance carrier, which I described above, led me to the realization that the companies carried a bludgeon—the threat of abandoning the market—which they could hold over the head of the insurance commissioner in demanding extortionate rate increases.

I believed that there could be no stability in the marketplace just as long as only a few companies were writing malpractice insurance. My view was reinforced a few months later when the St. Paul Fire & Marine Insurance Company announced it no longer would write hospital malpractice insurance unless it could change from a claims-incurred to a claims-made policy.

NEW DEVELOPMENTS

The increasing cost of malpractice insurance, the tightening market, and the cumulative effect of successive crises ultimately created the climate in which the taking of bold salutary steps became imperative. The New Jersey Hospital Association, prodded by the threat of St. Paul Fire, the insurer of 39 hospitals, to withdraw from the malpractice market, announced its intention of forming its own insuring company. The new company—a form of mutual company known as a reciprocal insurance exchange—came into being late in 1976 and immediately received my permission to solicit contracts of insurance, as a preliminary to its being licensed in New Jersey. Two months later I issued a certificate of authority to the Exchange after it had met all statutory requirements for admission, including establishment of a $1,000,000 paid-in surplus.

In the meantime, the Legislature had adopted Assembly Bill 1552, which empowered the Commissioner to activate a Reinsurance Association for any particular category of health care whenever he found that malpractice insurance for that category was not available. The measure had been signed by Governor Brendan T. Byrne on January 30, 1976, and four weeks later I activated the Association for hospital malpractice insurance. The immediate beneficiary of the activation of the facility was the Health Care Insurance Exchange and the hospitals it had contracted to insure, particularly nine Catholic hospitals that were losing their coverage.

The Exchange needed the Reinsurance Association because of a statutory limitation on the amount of coverage it could accept on any one risk. The law limits the individual coverage to 10 percent of a company's assets—in the case of the Exchange, $100,000, although the Exchange planned to provide one million dollars of coverage for each of the nine hospitals.

By writing million dollar policies and ceding 90 percent of the coverage to the Reinsurance Association and retaining 10 percent (the $100,000 limit) for itself, the Exchange was able to accomplish what it could not accomplish on its own and what no other company was willing to try to accomplish. Thereafter, the change in the marketplace was remarkable. No hospital needed to fear losing its coverage, since the Exchange, in conjunction with the Reinsurance Association, assured the availability of insurance.

Impressed by the performance of the Exchange, the Medical Society of New Jersey announced its intention of forming its own company. At the same time, the Federal Insurance Company, which was the exclusive carrier for your Society, announced its intention of reducing its writings and asked me to activate the Reinsurance Association for physicians' and

surgeons' malpractice insurance.

After reviewing the condition of the market, I activated the Association for physicians and surgeons, effective February 1, 1977 and six days before that date I issued a certificate of authority to the Medical Inter-Insurance Exchange, which you doctors were forming on your own. I designated the Federal Insurance Company as the provider company for the Reinsurance Association.

Thus, New Jersey's doctors finally had a choice of company. They could continue with Federal, which was reinsuring all policies with the Association, or they could obtain insurance from the Medical Inter-Insurance Exchange.

Both the Exchange and Federal used rates that took effect November 1, 1976 and included an 62.5 percent increase over the previous year's rate. However, I was disturbed by the size of the increase in rates that I had approved. But, on the basis of the information submitted to me, it was justified, as was the increase approved for hospital malpractice insurance. The actuaries had agreed that these were the appropriate rates and they put me in a bind, from which I could escape only by approving the recommended increase.

I sometimes feel that the actuarial science is little more than a guessing game, especially when it comes to the incurred but not reported (IBNR) losses that play a major role in forcing rates up. I feel that the rates are made to reflect insurance companies' unsupported forebodings of disaster rather than hard data that reflect the actual incurred losses.

In 1977, when I approved the rate revision for hospital insurance of the St. Paul company, I deliberately made the rates provisional and subject to revisions as soon as sufficient statistical data—of a hard rather than an actuarial nature—became available.

REVIEW OF EXPERIENCE

By 1978, St. Paul had made a thorough review of its experience and it showed that the rates could be reduced substantially to ease the burden on hospitals of paying for an essential insurance coverage. The 1977 provisional rate had been calculated on a five-year basis to reflect the lag in the reporting of malpractice claims and, as a result, the liability of the company increases each year. Thus, the premium increases each year from the first through the fifth year, when it is believed most, if not all, claims dating back to the first year will have been reported.

The provisional rate schedule projected a five-year per hospital bed insurance premium of $1,088 for basic liability limits of $100,000/$300,000. Under the new schedule the five-year premium was reduced to $791 per bed, a decrease of 27 percent. In addition, because the 1977 rates were provisional, the hospitals insured by St. Paul had their 1977 premiums recalculated and were given a refund or credit of the difference. Over the scheduled five-year program, a 500-bed hospital will pay a cumulative premium of $395,500 instead of $544,000, a saving of $148,500.

Later in the year I approved an even greater reduction—totaling about 68 percent in the rates of the Health Care Insurance Exchange, the company sponsored by the Hospital Association. That reduction included a refund of about $3.5 million in previously paid premiums.

It was the doctors' turn next.

In January of this year I approved a rate filing by the Medical Inter-Insurance Exchange (MIIE), which projected an average 8.3 percent decrease in rates. Like the insurance for hospitals, this filing was based on paid claims, rather than total incurred loss, so that I was dealing with hard data rather than actuarial flights of fancy. I would emphasize that the 8.3 percent represents an average decrease, actually the amount by which the company's annual premium would be reduced. As for individual doctors, some of you experienced premium decreases of up to 24.3 percent while for others the premiums remained the same.

After this decrease for MIIE, I subsequently approved a similar rate for those physicians insured through the New Jersey Medical Malpractice Reinsurance Association. In this connection, I would like to point out that the Reinsurance Association is now the direct insurer for primary coverage. The Federal Insurance Company, which used to be the direct insurer and then became the provider company for the Reinsurance Association, is now simply a servicing carrier to provide administrative and claims services. Doctors still will deal with Federal, however.

With two companies—MIIE and the Reinsurance Association assuring the ready availability of insurance—I was able recently to reject a filing by the Insurance Company of North America, which wanted to increase by 30 percent the rates of the 100 members of the American College of Obstetricians and Gynecologists it insured. I pointed out that the same coverage is available through MIIE or the Association at rates that are actually 44.3 percent below the rates proposed by INA.

Since malpractice insurance rates are a business expense that are reflected in the fees charged to patients, I am very much concerned that doctors are not paying an excessive rate, especially when the same coverage is available elsewhere at a considerable saving. Unless INA demonstrated that its rates were inadequate for this class of physicians, and it failed to do so, I could not approve a rate more than 44 percent above the rate at which these doctors could obtain the same insurance.

Another salutary effect of having insurance readily available is a competitive marketplace. Recently, the Vigilant Insurance Company asked for approval of a decrease of almost 20 percent in rates for doctors who are members of the American Psychiatric Association, to make their rates the same as those charged by MIIE and the Association. I understand that Vigilant's primary motivation was a competitive one.

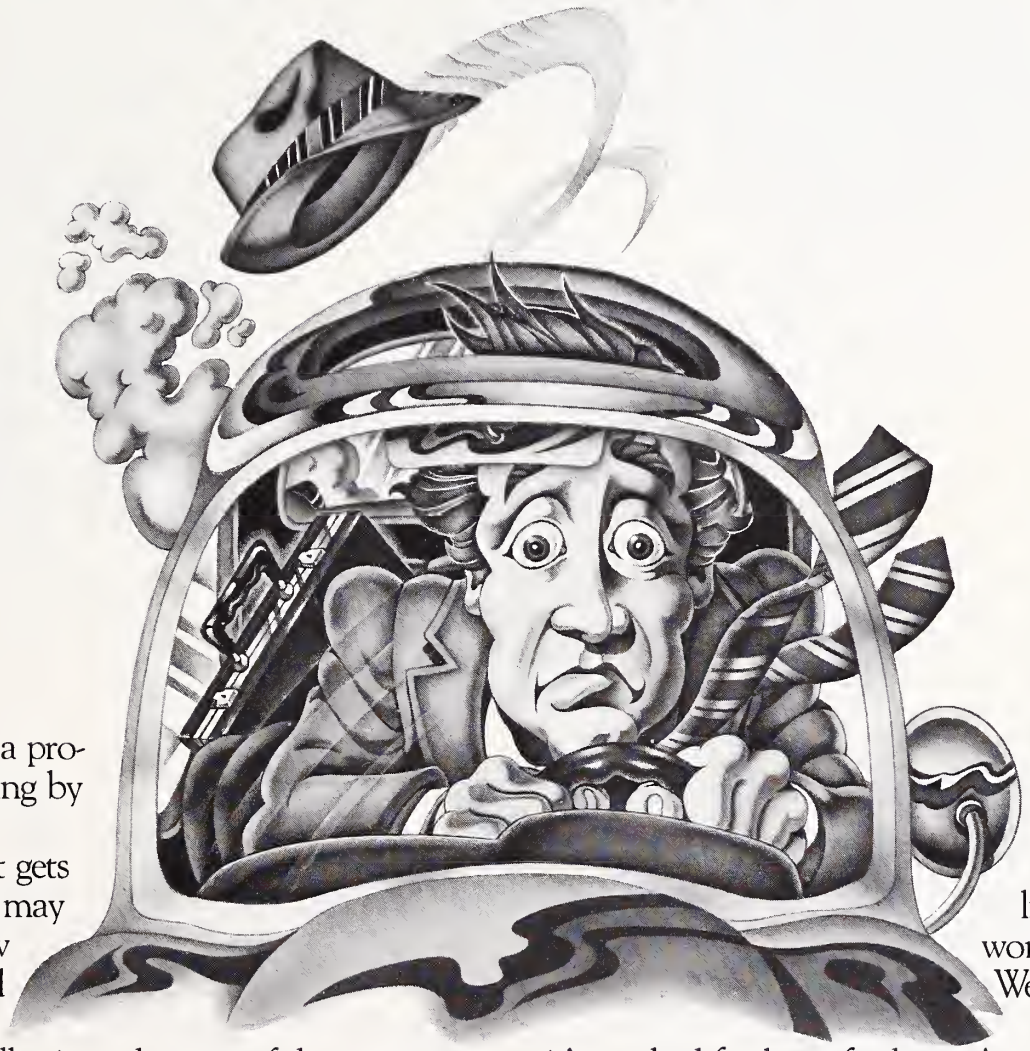
Now these are words we haven't heard much of in recent years in the medical malpractice insurance marketplace.

CONCLUSION

I think the outlook for medical malpractice insurance is good. New Jersey physicians and surgeons, hospitals, and other medical practitioners today are assured of obtaining insurance readily, and they have a choice of companies. Moreover, the rates, predicated on hard data, have started to come down.

When you contrast the market of today with that of only two or three years ago, the change must be viewed as remarkable.

THESE DAYS, INFLATION IS TAKING EVERYONE FOR A RIDE. HERE'S ONE WAY TO SLOW DOWN THE TRIP.



Set up a program of selling by phone.

Once it gets rolling, you may wonder how you ever did without it.

Especially since the cost of the average industrial sales visit now runs over $96.*

The person to see is your industry-trained New Jersey Bell Account Executive, who can summon a team of experts to train your people in moneymaking Bell System telephone selling techniques. Free.

True, selling by phone may not end all sales trips. But it can cut them down. And put to good use many of those long hours spent waiting in reception rooms or out on the road.

Will a program like this work for you? We think so. After all, it's worked for lots of others. And when you think of pouring $96 into every personal sales visit, you'll probably ask yourself not if you can afford to look into telephone selling.

But if you can afford not to.

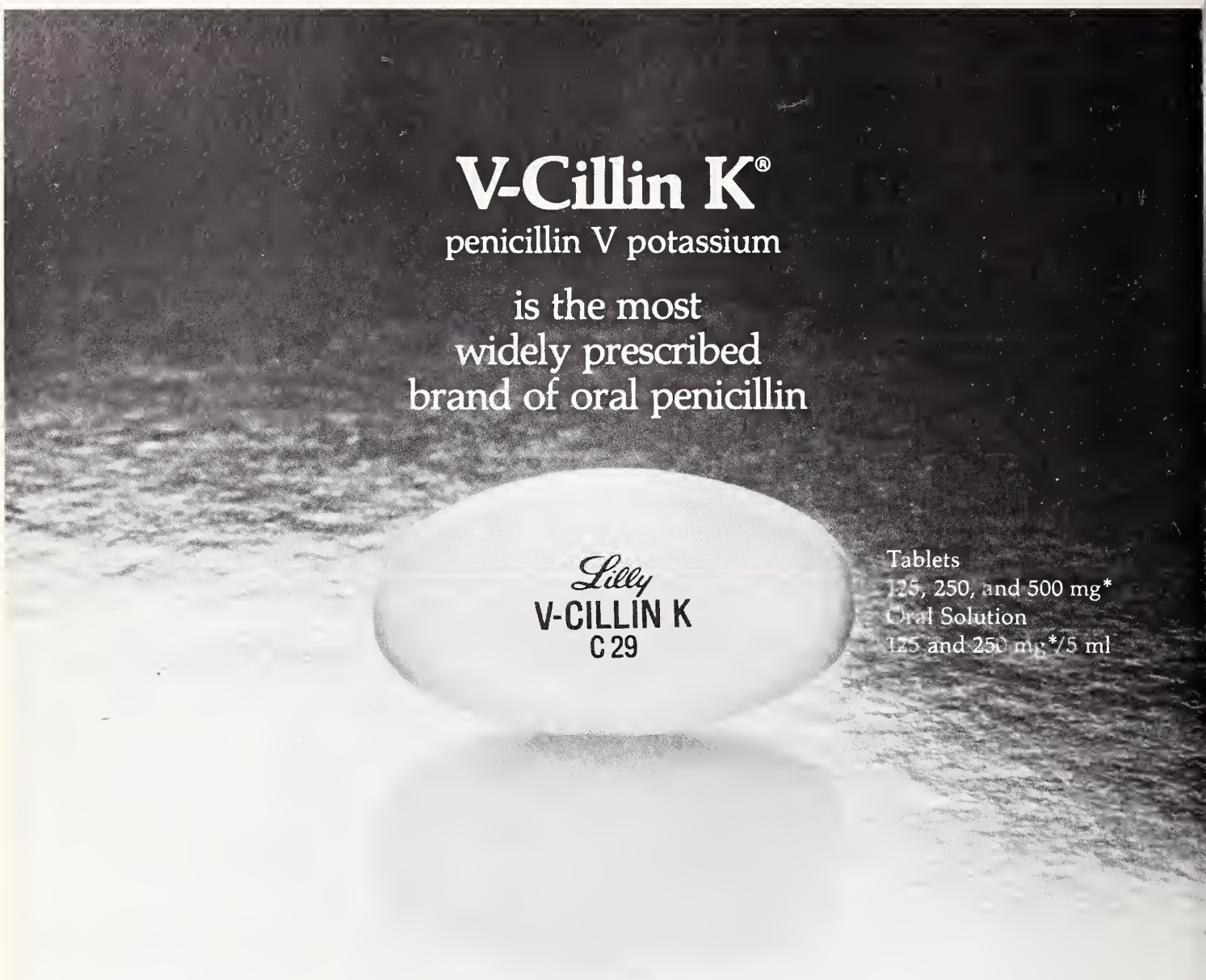
Because what looks like a problem of increasing costs may turn out to be an opportunity for increasing sales.

And that's a pretty good way to slow down inflation's inroads.

*Source: McGraw-Hill Research.

PHONING. SOMETIMES IT'S BETTER THAN BEING THERE.

New Jersey Bell



V-Cillin K®
penicillin V potassium

Description: V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

Indications: For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

Contraindication: Previous hypersensitivity to penicillin.

Warnings: Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

Precautions: Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

Adverse Reactions: Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin. (102175)

***Equivalent to penicillin V.**

Additional information available to the profession on request.

Lilly

Eli Lilly and Company
Indianapolis, Indiana 46206

900416

An Environmental Investigation of Clusters of Leukemia and Hodgkin's Disease in Rutherford, New Jersey*

THOMAS A. BURKE, M.P.H., SIDNEY GRAY, Ph.D.,
CYNTHIA M. KRAWIEC, B.S., RICHARD J. KATZ, M.S.,
PETER W. PREUSS, Ph.D., GLENN PAULSON, Ph.D., Trenton

The New Jersey Department of Environmental Protection, Toxic Substances Program conducted an investigation into environmental factors which may have contributed to the development of childhood leukemia and Hodgkin's disease clusters in Rutherford, New Jersey during 1972-1976. The environmental profile and monitoring data are detailed and results discussed. The profile failed to reveal any past environmental condition or event which could be related directly to the clusters.

In March, 1978, local school and health officials in Rutherford, New Jersey, were apprised of a group of childhood leukemia cases at the Pierrepont Elementary School, one of seven schools in the community. An investigation begun in April, 1978, by the New Jersey Department of Health found increased rates of both childhood leukemia and Hodgkin's disease. The leukemia cases were clustered in the Pierrepont School district, while cases of Hodgkin's disease were more widely scattered with the majority occurring in the northern portion of the community.

The New Jersey Department of Environmental Protection (DEP), Program on Environmental Cancer and Toxic Substances (PECTS), conducted a two-phase investigation concurrent with that of the Department of Health. Phase I was an environmental profile of the Rutherford area, combining information from a wide variety of sources in an attempt to identify environmental conditions unique to the municipality which might contribute to an explanation of the increased leukemia and Hodgkin's disease rates. Phase II consisted of environmental monitoring of air, water and soil samples as well as measurement of ionizing and non-ionizing radiation. Both phases primarily were keyed to the identification of benzene and ionizing radiation, as these two environmental insults have been conclusively linked to leukemia. Numerous other organic substances also were investigated in an effort to make the scope of the study as wide as possible.

PHASE I—ENVIRONMENTAL PROFILE

Background—Rutherford is a primarily residential community of approximately 21,000 people, located in eastern Bergen County and encompassing 2.6 square miles. It is situated on a ridge which forms the western boundary of the tidal meadowlands, the site of a major sports complex. The town is bordered on the west by the Passaic River and on the south and east by major highways.

While there are no industrial facilities within the community, forty-two plants involved in the manufacturing of chemicals and allied products are located within three miles of the town's center, and several landfills are in the vicinity.

The prime source of water is the Hackensack River via the Oradell Reservoir. The Hackensack Water Company serves Rutherford as well as fifty-nine other communities and provides filtration, sedimentation and disinfection treatment before distribution.

Data Sources—A wide range of federal and state agencies were queried for data regarding industrial chemical usage and disposal, air and water monitoring results, sources of both ionizing and non-ionizing radiation, and other poten-

*A study by the Program on Environmental Cancer and Toxic Substances, New Jersey Department of Environmental Protection, Daniel J. O'Hern, Commissioner. Correspondence may be addressed to Dr. Sidney Gray, Toxic Substances Program, NJ Department of Environmental Protection, P.O. Box 1390, Trenton, New Jersey 08625.

"The environmental profile failed to reveal any environmental condition or event which could be related directly to the clusters."

tially significant influences. A full list of agencies contacted and data compiled is provided in the appendix.

Results—The environmental profile failed to reveal any environmental condition or event which could be related directly to the clusters. No unusual sources of ionizing radiation were found. Several radio and television transmitters are located near Rutherford; however, there are no data to indicate an unusually high concentration of non-ionizing radiation in the community.

The profile revealed many potential sources of air pollution surrounding Rutherford including industry, motor vehicle traffic and landfills.

Nothing unusual was found concerning Rutherford's water supply. The entire town is served by the Hackensack Water Company which serves a total of 60 municipalities. The only significant finding in a review of past sampling results was a survey by EPA which found an average concentration of 66 parts per billion of chloroform. The proposed EPA maximum level for total trihalomethanes (of which chloroform is one example) is 100 parts per billion.

No records were found detailing previous soil analyses in Rutherford. The environmental profile yielded no information which would indicate contamination of the town's soil.

PHASE II—ENVIRONMENTAL MONITORING

Sampling was conducted to determine levels of potential carcinogens in the air, water and soil at the Pierrepont School as well as the levels of radiation, both ionizing and non-ionizing, in the air, water, building materials, and milk in and around the school.

Methodology—The following methodologies were used in determining the levels:

1. Radiation

a. *External exposure*—Measurements were made of whole-body exposures using a Reuter Stokes III pressurized ionization chamber and thermoluminescent dosimeters (TLDs). TLDs also were placed around two chemical companies in the Rutherford area which use radioactive materials.

b. *Inhalation*—High-volume air samplers were set up in a classroom and on the school roof. Samples taken in the classroom were short-term, collected over a five-hour period. Samples taken on the roof were continuous, collected and analyzed on a weekly basis. Air samples were analyzed using high-resolution gamma-ray spectrometry. Radon gas concentrations were analyzed through the use of scintillation flasks and thermoluminescent dosimeters.

c. *Ingestion*—Samples of water from a public tap in the Pierrepont School were analyzed for gamma rays, alpha and beta particles, tritium, strontium 89 and 90 and radium 226. Milk from the school's distributor was analyzed for gamma radiation and strontium 89 and 90.

d. *Building material*—A sample of building block was analyzed by gamma-ray spectrometry for radiation levels.

e. In addition, a comprehensive survey of non-ionizing radiation impinging upon the Pierrepont School was performed. Utilizing several field intensity meters with various antennas, measurements were made of frequencies ranging from 10 KHz (10,000 cycles/sec) to 12 GHz (12 billion cycles/sec). These frequencies include radio, shortwave, television, radar and microwave bands.

2. Water

Water samples were taken in triplicate from three public taps at the Pierrepont School. These samples—collected in Teflon-lined, screw-top bottles—were kept on ice until analysis by gas chromatograph/electron capture techniques. Minimum reportable concentrations ranged from 90 parts per billion (by weight) for methylene chloride to 0.1 ppb for dibromochloromethane and others. Accuracies likewise varied among the target compounds, ranging from approximately ±75 percent for methylene chloride to ±3 percent for bromoform.[2,3,10] Analyses were performed by the Department of Environmental Sciences at Rutgers University.

3. Air

Air samples were collected simultaneously at three locations for several days. Pump samplers were used to draw air through a stainless steel tube filled with Tenax-GC to adsorb volatile organic substances. The organics were then thermally extracted and analyzed using a gas chromatograph fitted with a flame ionization detector. This methodology provided lower limits of detection on the order of 0.01 parts per billion by volume and analytical accuracies which ranged from ±61 percent for para-dichlorobenzene to ±15 percent for benzene[8]. Sample collection and analysis were performed by the New Jersey Institute of Technology Air Pollution Research Laboratory.

4. Soil

Two samples were taken at each of six locations around the Pierrepont School to obtain a representative sampling of the first five inches of the soil horizon. Storage was in vials with Teflon-seal, crimp-on tops which were kept on ice during transport and then sealed in plastic bags until analyzed using gas chromatography and mass spectrometry. The general lower limit of detection was 10 parts per billion by weight and the analytical accuracy was ±50 percent for all compounds.[11] Analyses were performed by the U.S. Environmental Protection Agency Region II Laboratory in Edison, New Jersey.

5. Dust—In response to citizen requests, a sample of "green dust" found in the neighborhood around the Pierrepont School was taken from the porch of a resident. The dust was fixed, stained, and observed under a microscope at 450X magnification.

Results—The following is a summary of the results of laboratory testing on all environmental monitoring performed.

1. Radiation—Monitoring revealed no elevated levels of ionizing radiation. Analysis of air samples and building materials from the school revealed lower levels of radioactivity than present in background samples taken in the Trenton area. Water samples revealed no abnormal activity with no results exceeding federal water quality standards. Results of the analysis of milk consumed at the school were consistent with levels for pasteurized milk generally available in New Jersey[1]

The scan for non-ionizing radiation also revealed nothing unusual. In the AM broadcast band the integrated power

Table I
Radiation Monitoring Data

Ionizing Radiation	
Exposure Mode	**Levels**
Air	No measurement above background levels
Water	All results better than required by Federal water quality standards
Milk	Levels consistent with pasteurized milk consumed statewide
Building Material	No measurements above background levels

Non-ionizing Radiation	
Frequency (million cycles/sec)	**Power Density (microwatts/sq. centimeter)**
0.585-1.2 (AM-radio band)	1.7
55-213 (VHF-TV & FM-radio band)	0.0014
512-800 (UHF-TV band)	0.0009
All other frequencies from 0.01-12,000	Less than 0.0007

Table II
Water Monitoring Data

Compound	# of Samples with Measured Levels[a]	# of Samples with Unmeasured Traces	Mean Value of Measured Levels[b]	Range of Measured Levels[b]
Trifluoromethane[c]	0	0	–	–
Methyl chloride	0	0	–	–
Methylene chloride	0	0	–	–
Chloroform[c]	3	0	15.0	12.0-20.0
Carbon tetrachloride	1	2	0.14	0.14[d]
Methyl bromide	0	0	–	–
1,2-Dibromoethane	0	0	–	–
Dichlorobromomethane[c]	3	0	4.0	2.8-7.0
Dibromochloromethane[c]	3	0	1.7	1.1-2.5
Bromoform[c]	0	2	–	–
Diiodomethane	0	0	–	–
1,2-Dichloroethane	0	0	–	–
1,1,1-Trichloroethane	0	0	–	–
Vinyl chloride	0	0	–	–
1,1,2-Trichloroethane	0	3	–	–
Trichloroethylene	0	0	–	–
1,1,2,2-Tetrachloroethane	0	0	–	–
Tetrachloroethylene	1	2	0.1	0.1[d]
Benzene	0	0	–	–
o,m,p-Dichlorobenzene	0	0	–	–
Trichlorobenzene	0	0	–	–
Toluene	0	0	–	–

[a] based on 3 samples taken

[b] levels in parts per billion (ppb) by weight

[c] trihalomethanes; although there are no recognized safety standards for organics in drinking water, the U.S. Environmental Protection Agency recently has proposed a standard of 100 parts per billion for total trihalomethane concentration

[d] only one measurable sample

density was less than two microwatts per square centimeter. The combined integrated power density for all other frequencies was 0.003 microwatts per square centimeter, with most of this being due to FM radio, UHF and VHF television bands (Table I).

2. Water—Sampling revealed no benzene present in the drinking water. Low levels of seven organic compounds which frequently have been identified in surface water supplies were found. Chloroform levels were found to be substantially lower than in previous EPA monitoring, with a mean of 15 parts per billion[2,3] (Table II).

3. Air—Monitoring revealed low levels of nine suspected carcinogens. The levels ranged from 0.1 to 3 parts per billion. Benzene was present in all samples in higher levels than any of the other compounds, with a mean concentration of 1.0 ppb (Table III).

4. Soil—A total of four organic chemicals, (benzene, 1,1,1-trichloroethane, toluene and methylene chloride) were identified in the soil samples. Benzene was present in one sample taken from a play area in the rear of the Pierrepont School. The concentration of all the organics was less than 10 parts per billion (Table IV).

5. Dust—Examination of the green-colored dust determined it to be composed primarily of pollen grains and spores. Other extraneous material mixed with the sample was judged to be normal road dust.

Table III
Air Monitoring Data

Compound	# of Samples with Measurable Levels[a]	# of Samples with Unmeasured Traces	Mean Value of Measured Levels[b]	Range of Measured Levels[b,c]
Chloroform	0	9	–	–
Carbon tetrachloride	0	0	–	–
Dichloroethane	9	15	1.0	0.1-3.0
1,1,1-trichloroethane	0	2	–	–
Trichloroethylene	8	18	0.5	0.1-0.7
Tetrachloroethylene	14	18	0.6	0.13-0.1
Benzene	35	0	1.0	0.06-3.1
o-Dichlorobenzene	0	10	–	–
p-Dichlorobenzene	0	1	–	–
Nitrobenzene	4	3	0.5	0.2-0.9

[a] based on 35 samples taken

[b] levels in parts per billion (ppb) by volume

[c] At this time, there are no ambient air standards for these compounds. With the exception of benzene, little data are available on average levels of these contaminants. A 1977 report by the U.S. Environmental Protection Agency Carcinogen Assessment Group calculated that the annual average exposure of an individual to ambient benzene from all sources is 1.03 ppb.

Table IV
Soil Monitoring Data

Compound	# of Samples	# of Samples with Detectable Levels	Level of Detection (ppb)*
Methylene chloride	6	5	10
1,1,1-trichloroethane	6	4	10
Benzene	6	1	10
Toluene	6	4	10

*At this time there are no standards for organic chemicals in soil. Insufficient data are available to determine those levels common to the soil of residential areas.

DISCUSSION

The approach taken in the environmental investigation in Rutherford consisted of construction of a profile to identify possible sources of known or suggested carcinogens and to search for these agents in the environment. Primary emphasis was placed upon those toxics and carcinogens which the Department of Environmental Protection is monitoring statewide. All available resources were utilized in an attempt to identify carcinogenic agents which may be present in Rutherford in unusual concentrations, and which in some way may be causally related to the clusters.

Several carcinogenic substances were found in low concentrations in the Rutherford environment. However, given the present state of knowledge about the etiology of Hodgkin's disease and leukemia, and the effects of low-level exposure to carcinogens, it is impossible to link the presence of these substances to the clusters.

Recognition of the problem of low levels of toxics and carcinogens in the environment is a relatively recent development in environmental science. There have been few systematic attempts to measure these substances, and therefore, there is a scarcity of information concerning "average" levels. There are no safety standards for the vast majority of carcinogens in air, water or soil and virtually nothing is known of the long-term human health effects of low-level exposure to these substances. For these reasons, interpretation of the results of the Rutherford investigation is a difficult task.

Seven organic chemicals, including four suspected carcinogens, were identified in the Rutherford water. However, the concentrations were lower than those found by the U.S. Environmental Protection Agency in many other New Jersey municipalities served by surface water systems.[2,3]

Benzene, a known leukemogen,[4,5,6] was found to be the most prevalent air pollutant. It was found in measurable amounts in all 35 samples. This is not unexpected since it is widely used in industry and is present in gasoline. The mean concentration found was 1.0 part per billion. There is little information available on average benzene concentrations in New Jersey; however a 1977 report by the Environmental Protection Agency calculated that the annual average exposure of an individual to ambient benzene from all sources is 1.03 parts per billion[7]. Therefore, the concentrations found in Rutherford cannot be considered abnormal. However, much research must be done before the relationship between low levels of benzene in air and human leukemia is understood.

None of the other chemicals identified in the Rutherford air has been linked to leukemia or Hodgkin's disease. The concentrations found were consistent with levels found

"There are no safety standards for the vast majority of carcinogens in air, water or soil and virtually nothing is known of the long-term human health effects of low-level exposure to these substances."

elsewhere by E.P.A.[8]; however, little systematic monitoring has been done for these substances and their effect on human health is not clearly understood.

Four organic chemicals were identified in soil samples in concentrations below 10 parts per billion. Benzene was detected in one sample taken from the play area of the Pierrepont School. There is virtually no data on levels of organic chemicals in the soil of residential areas; therefore it is impossible to compare Rutherford's soil with that of other areas. However, these organics are common contaminants of both air and water, and their presence in soil near major highways and industrial facilities is to be expected[2,3,8]

The ionizing radiation levels found in Rutherford were no higher than background samples taken elsewhere in the state. Historic monitoring results indicate that there is nothing unusual about the amounts found. The scan for non-ionizing radiation also revealed no elevated levels. Virtually all the non-ionizing radiation was found to be due to radio and television broadcasting, and these frequencies have not been associated with harmful health effects to date. The total power density received in Rutherford is common in a large metropolitan area[9].

Initial results from the environmental investigation indicate nothing about the environment in Rutherford would differentiate it from other communities in the state. No factors have been identified which can be causally linked to the clusters. There are, however, many unanswered questions. The health effects of the low levels of carcinogens and toxics found in Rutherford are unknown. The chemicals used and emitted by neighboring industries are also, for the large part, unknown. Also past environmental conditions in the area are unknown.

The Department of Environmental Protection, Program on Environmental Cancer and Toxic Substances currently is confronting the problems of these unknowns. Past environmental conditions never can be accurately reconstructed; however, many positive steps are being taken. Environmental monitoring similar to that conducted in Rutherford is currently in progress statewide. The results of this monitoring well may provide the information needed further to evaluate the Rutherford data and to determine any unusual contamination which may adversely affect human health. In addition, a survey of approximately 12,000 industries, including those in the Rutherford area, is planned to establish those locations at which certain specified known and suspected carcinogens and toxic chemicals are manufactured, utilized and disposed of, thereby providing a potential source of emission to the environment.

This information, coupled with the cancer incidence data which soon will be available from the Department of Health cancer registry, may permit investigators to identify relationships between environmental and industrial pollution and the occurrence of cancer. It is hoped that such investigations will provide a better understanding of the causal factors of cancer, and perhaps permit the identification of environmental effects which may have played a role in the Rutherford clusters.

SUMMARY

The New Jersey Department of Environmental Protection, Program on Environmental Cancer and Toxic Substances, evaluated the results of the Environmental investigation conducted in Rutherford, New Jersey, in response to the identification of clusters of childhood leukemia and Hodgkin's disease. The investigation consisted of two phases: an environmental profile, and environmental monitoring, both with heavy emphasis on benzene and ionizing radiation, two known leukemogens.

The environmental profile combined information from numerous sources in an attempt to identify environmental conditions which might be unique to Rutherford and in some way related to the clusters of disease.

The environmental monitoring program was constructed around examination of all potential sources of exposure to acute levels of mutagens. Air, drinking water, and soil were analyzed for numerous known or suspected cancer-causing agents. A complete survey of non-ionizing radiation, including microwaves, was conducted.

The environmental profile failed to reveal any past environmental condition or event which could be related directly to the clusters. Although numerous pollution sources, including industrial facilities, motor vehicle traffic and landfills are located in the vicinity, nothing was revealed which would differentiate the Rutherford environment from that of other communities in heavily-industrialized areas.

The environmental monitoring program failed to detect unusually high levels of radiation or potential carcinogens. The levels found are not atypical of general conditions in the region.

The information accumulated during this study and that derived from other on-going programs will provide the database for further investigations into the Rutherford problem.

"... results ... indicate nothing about the environment in Rutherford would differentiate it from other communities in the state."

REFERENCES

1. Unpublished data. Bureau of Radiation Protection, New Jersey Department of Environmental Protection, Trenton, NJ.

2. U.S. Environmental Protection Agency: National organic monitoring survey. Technical Support Division, Office of Water Supply, Washington, D.C., 1978.

3. U.S. Environmental Protection Agency: National organic monitoring survey, general review of results and methodology. Technical Support Division, Office of Water Supply, Washington, D.C. 1977.

4. Infante PF, Rinsky RA, Wagoner JK, Young RJ: Leukemia in benzene workers. *Lancet* 2:76-78; 1977.

5. Vigliani EC: Leukemia associated with benzene exposure. *Ann NY Aca Sci* 271:143-151; 1976.

6. Occupational Safety and Health Administration: Occupational exposure to benzene, emergency temporary standard. *Federal Register* 42:22516-22529, May 3, 1977.

7. Mara SJ and Lee SS: Human exposure to atmospheric benzene. U.S. Environmental Protection Agency (contract 68-01-4314, Stanford Research Institute), Washington, D.C., Sept., 1977.

8. Pellizzari ED: Identification and analysis of ambient air pollutants using combined techniques of gas chromatography and mass spectrometry. U.S. Environmental Protection Agency (contract 68-02-2262, Research Triangle Institute), Washington, D.C., November, 1977.

9. Janes DE, Tell RA, Athey TW, Hankin NN: Radio frequency radiation levels in urban areas. *Radio Science*, 12:65, Nov-Dec, 1977.

10. Tucker RK and Burke TA: A second preliminary report on the findings of the state groundwater monitoring project. New Jersey Department of Environmental Protection, Trenton, N.J., December, 1978.

11. USEPA: Sampling and analysis procedures for screening of industrial effluents for priority pollutants. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio, March, 1977 (Revised April, 1977).

APPENDIX

The following sources were employed and the indicated data incorporated into the environmental profile:

1. U.S. Environmental Protection Agency (USEPA)
 a. Voluntary hydrocarbon emission inventory for industries in Bergen and Passaic counties.
 b. List of all industries discharging waste into surface waters in the Rutherford area.
 c. List of all registered industries discharging waste into municipal sewerage systems.
 d. Results of sampling along the Hackensack and Passaic Rivers for toxic pollutants.
 e. Water quality data for all monitoring stations in the Rutherford area.
 f. Ambient air monitoring results for volatile organic substances at Linden and Edison.
 g. Measurement of carcinogenic vapors in ambient atmosphere for seven New Jersey locations including Clifton and Passaic.
2. New Jersey Department of Environmental Protection
 a. Bureau of Geology
 1) Map of land use patterns in the Rutherford area.
 2) Plot of all registered wells in the Rutherford area.
 3) Preliminary plot of industrial waste discharge points.
 4) Base map depicting elevation in Rutherford area.
 b. Division of Water Resources
 1) List of chemical spill incidents in the Rutherford area from 1972 to April 1978.
 2) List and map of permit-holding industrial dischargers in Rutherford area.
 3) Summary of water quality data on the potable supplies of Rutherford and surrounding areas.
 4) Results of USEPA study to measure organics in surface water supplies, including the Hackensack Water Company which services Rutherford.
 c. Bureau of Radiation Protection
 1) List of radioactive material handlers.
 2) Statement on the compliance status of dental x-ray machines in the area.
 3) List of diagnostic x-ray machines in the area.
 4) List of Manhattan Project sites in New Jersey.
 d. Division of Environmental Quality
 1) List of 42 major industries in the area surrounding Rutherford, by Standard Industrial Classification (SIC) code.
 2) Map of major industries above, including distance from school.
 3) Plot of "wind rose" for the Rutherford area.
 4) List of business and industry in the area, including all gasoline stations.
 e. Program on Environmental Cancer & Toxic Substances
 1) Results of groundwater monitoring in the northeast area.
 2) Results of surface water monitoring in the northeast area.
 3) Air quality and industrial indices for all New Jersey counties.
 f. Solid Waste Administration
 1) Hazardous waste survey for all industries in the Rutherford area.
3. New Jersey Department of Labor and Industry
 a. List of all industries in the Rutherford area covered by those Standard Industrial Classification (SIC) codes which are associated with the use and possible emission and discharge of hazardous chemicals, as follows:

SIC Code	*Industries Covered*
2813	Industrial gases
2818	Inorganic pigments
2819	Industrial inorganic chemicals not elsewhere classified
2833	Medical chemicals and botanical products
2834	Pharmaceutical preparations
2841	Soap and other detergents, specialty cleaners
2842	Specialty cleaners, polishers and sanitizing preparations
2843	Surface active agents, finishers and oils
2844	Perfumes, cosmetics
2851	Paints, varnishes, lacquers, enamels and allied products
2865	Coal, tar, crudes and cyclic intermediates, dyes, organic pigments, lakes and toners
2869	Industrial organic chemicals not elsewhere classified
2893	Printing ink
2899	Chemical and chemical preparations not elsewhere classified

Remember

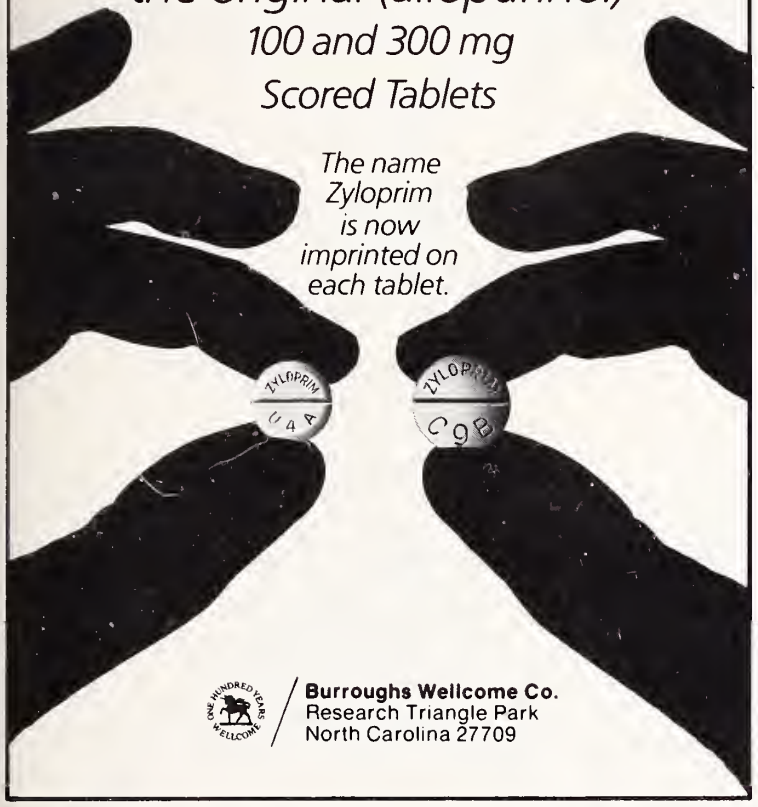
ZYLOPRIM®

the original (allopurinol)

100 and 300 mg

Scored Tablets

The name Zyloprim is now imprinted on each tablet.



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Foundation provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

The Foundation is supported by an in-house modern laboratory equipped to do most tests required for diagnosis and treatment. Literature on request.

1430 Second Avenue
New York, N.Y. 10021
Phone: 744-5500

A private psychiatric hospital for:

Adults

The adult program provides each patient with a comprehensive neuropsychiatric evaluation that includes a clinical and psychosocial assessment as well as psychodiagnostic and neurological testing. Treatment, based on the results of the evaluation, is provided in a therapeutic community setting offering pharmacologic and individual, group, and family programs.

Adolescents

Fair Oaks offers a specialized evaluation and treatment unit for adolescents. Internal and interpersonal problems are addressed through the use of a therapeutic community as well as individual group and family therapy. Certified tutors enable adolescents to continue their studies.

Alcohol and Sedative Dependent Persons

The **One Day at a Time Unit** offers treatment to persons dependent on alcohol or sedatives through a 28-day program of physical stabilization, counseling and introduction to continuing supports such as Alcoholics Anonymous.



For further information, write or call:
Admissions Coordinator

Fair Oaks HOSPITAL

19 Prospect Street
Summit, New Jersey 07901

201 / 277-0143

KESSLER INSTITUTE FOR REHABILITATION

West Orange, New Jersey

Affiliated with the College of Medicine and Dentistry of New Jersey

A voluntary, non-profit specialty hospital funded in 1949 serving physically handicapped children and adults. Intensive and comprehensive medical services are provided to inpatients and outpatients; services include social, psychological and vocational services for patients with spinal cord injuries, stroke, amputations or any physical impairment due to congenital condition, accident or disease.

Total facilities include a 76-bed inpatient wing; separate outpatient department; complete hydrotherapy unit; complete speech and audiology services; comprehensive outpatient amputee and urological services.

Fully accredited by the Joint Commission on Accreditation of Hospitals and the Commission on Accreditation of Rehabilitation Facilities.

Provider of hospital services under Medicare and Medicaid.

* * * *

ADMISSION BY MEDICAL REFERRAL TO DIRECTOR OF ADMISSIONS

* * * *

RICHARD A. SULLIVAN, M.D., Medical Director

KENNETH W. AITCHISON, Executive Director

Telephone: (201) 731-3600

KATE MACY LADD CONVALESCENT HOME

Far Hills, N.J.

Barry L. Mills, FACNHA, LNHA
Administrator

Don T. Van Dam, M.D., DABFP
Medical Director

Under the terms of the Will of the late Walter G. Ladd we provide

"Skilled Convalescent Care Without Charge" To Ambulatory Female Patients.

Inquiries to:
Newark Office—744 Broad St.
Newark, N.J. 07102
For all information
Tel: (201) 622-1484

Over 20,000 admissions since 1949

use the Experienced Laboratory

SM

SOUTH MOUNTAIN LABORATORIES • INC

for CONTROL-RESEARCH

SERVICES IN

- **PHARMACOLOGY**
- **ENDOCRINOLOGY**
- **TOXICOLOGY**
- **COSMETICS**
- **BIO-ASSAY**
- **PLASTIC IMPLANT**
- **HUMAN SKIN TESTING**

380 Lackawanna Pl., South Orange, N.J. 07079 (201) 762-0045

•

1102 Industrial Parkway, Bricktown, N.J. 08723 (201) 458-0031

Epidemiologic Investigation of Clusters of Leukemia and Hodgkin's Disease in Rutherford, New Jersey*

WILLIAM HALPERIN, M.D., RONALD ALTMAN, M.D., ANNETTE STEMHAGEN, M.P.H., ALFRED W. IACI, M.S., GLYN CALDWELL, M.D., THOMAS MASON, Ph.D., JOANNE BILL, B.S.N., TOSHI ABE, M.S.W., JAMES F. CLARK, B.S., Trenton

In response to concern over an apparent cluster of leukemia and Hodgkin's disease cases in Rutherford, New Jersey, the New Jersey State Department of Health conducted an epidemiologic investigation of possible etiologic risk factors in the area. Results of a case-control interview study are discussed. The available technology was unable to determine if the excess disease incidence represented a chance event or a cause unique to Rutherford.

In March 1978 residents of a neighborhood of Rutherford, New Jersey served by the Pierrepont Elementary School became very concerned about a cluster of cases of childhood leukemia in their neighborhood and brought the matter to the attention of school and local health officials. These officials in turn contacted the New Jersey State Department of Health, and an extensive investigation followed. This report details the epidemiologic investigation conducted in Rutherford by the New Jersey State Department of Health and a companion report describes the environmental monitoring conducted by the New Jersey State Department of Environmental Protection (p. 259, this issue).

BACKGROUND

Rutherford is a residential community of 21,000 population in Bergen County, New Jersey. It is situated 10 kilometers west of midtown New York City, and is just west of a swampy area called the Meadowlands, consisting of the Hackensack River and its tributaries. Small industries have located in the non-swampy area, and, in recent years, new residential areas and a large sports complex have been built just east of Rutherford.

The community is primarily middle class, with most families living in single family or small multiple dwelling units. There are a few high-rise apartment complexes. Rutherford itself contains very little industry, but there are large industrial complexes in the surrounding area. The community has five public grammar schools and one parochial grammar school. The Pierrepont School is the largest public school and served an average of 541 students in grades kindergarten through six for 1973-1978. There are no hospitals in Rutherford; hospital care is provided in about a dozen hospitals in surrounding communities.

METHODS

A "case" is a person with histologically confirmed leukemia, Hodgkin's disease (HD), or non-Hodgkin's lymphoma (NHL) who was a resident of Rutherford prior to diagnosis and who was diagnosed between January 1, 1973 and March 31, 1978. Diagnosis was confirmed by hospital record review or physician communication.

A list of cases was compiled from those patients identified

*From the Division of Laboratories and Epidemiology, New Jersey State Department of Health, Trenton; Field Services Division and Chronic Disease Division, Bureau of Epidemiology, Center for Disease Control, Atlanta; Environmental Epidemiology Branch, National Cancer Institute, Bethesda, Maryland. Dr. Halperin, Dr. Altman, Ms. Stemhagen, Mr. Iaci, Ms. Bill, Mr. Abe and Mr. Clark are with the N.J. State Department of Health; Dr. Halperin also is with the Center for Disease Control in Atlanta as is Dr. Caldwell; and Dr. Mason is with the National Cancer Institute in Bethesda. A portion of this analysis was supported by Contract No. 1—CP—61031 from the National Cancer Institute. Correspondence may be addressed to Ms. Stemhagen, New Jersey State Department of Health, Room 405, John Fitch Plaza, P.O. Box 1540, Trenton, New Jersey 08625.

Table 1
Areas Investigated in the Questionnaire

Demographic Information

Sex
Birthplace
Residential history
Religion

Medical History

Prior illnesses
Transfusions
Birth defects
Tonsillectomy
Allergies
Infectious mononucleosis
Diagnostic x-rays
X-ray therapy
Childhood infectious diseases
Immunization less than one year prior to onset

Maternal Medical History

Illness during pregnancy*
X-ray during pregnancy*
Vitamins during pregnancy*
Other drugs during pregnancy*
Birth weight*
Smoking during pregnancy*
Breast feeding*
Bottle feeding*

Family History

Patient's occupation
Parents' occupations
Cancer in immediate family
Cancer in peripheral family
Birth defects in peripheral family
Consanquinity

Contacts and Activities

Personal contact with cancer
Pets:
- Cats
- Dogs
- Gerbils

Play in the Meadowlands
Contact with sick animals
Contact with wild animals
Exposure to animal feces
Hobbies
Fishing or hunting
Petting zoos
Use of swimming pools
Childhood poisoning
Illness in close friend

Environmental Exposures

Microwave ovens
House extermination
Trees which died
Trees treated or sprayed
Consumption of local foods
Odors and dusts:
- rubber smell
- green dust
- perfume odor

Color television
Paint stripping
House painting
Household insecticides
Benzene shampoo

*Not included in questionnaire administered to Hodgkin's disease cases

by a concerned community group, from cases found in a record-room search of ten local hospitals and two major referral hospitals in New York City, and from responses to public appeal to the community.

The expected number of cases of each disease was calculated from age-specific incidence rates from the Third National Cancer Survey (1969-1971)[1] and from the New York State Cancer Registry for 1974-1975 (personal communication with Dr. William S. Burnett, N.Y. State Cancer Registry). Estimates of the population were established by applying life-table techniques to the 1970 United States Census data for Rutherford. Comparisons of the observed number of cases in 1973-1978 with the number expected were made assuming that the observed incidence follows a Poisson distribution.

A questionnaire developed by the Cancer Branch, Bureau of Epidemiology, Center for Disease Control, served as a nucleus for this study. Questions were added as interviewees supplied leads (Table 1); families already interviewed were then recontacted to complete the interviews. Interviewing was limited to the families with a childhood leukemia case and to all cases of HD.

A systematic 20 percent sample of sixth graders enrolled at the Pierrepont School in 1977-1978 served as a control population for the leukemia cases. In addition, since Pierrepont School cases and controls would have been exposed to the same neighborhood environmental factors, responses concerning environmental questions for the leukemia cases were compared with the frequency of responses of the 17 families selected at random from the community that served as the HD control group.

Controls for HD cases were matched by race and sex, and were within five years of age of the case. They were identified from a page in the county telephone directory selected by the random number function of a calculator. The first Rutherford resident in alphabetical order on that page was telephoned and a roster of household members completed. If any household member matched the next control needed from a preordered list of controls, he was requested to participate in a phone interview. If that resident refused, the next household identified in the same fashion was contacted.

Of the 102 telephone calls placed, 18 (17.6 percent) did not answer on repeated attempts on days, nights and weekends; 42 (41.2 percent) respondents lived outside of Rutherford, although they were listed as Rutherford residents in the directory. There were no eligible controls in 21 of the remaining 42 households (50 percent). Only 17 of 21 eligibles (81 percent) were interviewed because four refused. This allowed for a two-to-one match of eight cases and a one-to-one match for another.

Analyses of case-control data were made using the technique of variable matching ratios as described by Miettinen.[2] Age-adjusted mortality rates were calculated for HD, leukemia, and all malignant neoplasms for the period of 1972-1976 for all New Jersey municipalities along with the age-specific mortality rates for childhood leukemia (ages 0-19). This was done using the computer programs that have been developed by the Special Epidemiology Project of the

Table 2

Characteristics of Childhood Leukemia Cases Diagnosed Between January 1, 1975 and March 31, 1978 Rutherford, New Jersey

Case number	Sex	Diagnasis	Age at diagnasis yr/ma	Birth date ma/yr	Date moved into town mo/yr	Date moved from tawn ma/yr	Date af diagnasis ma/yr	Date of death mo/yr
1	M	ALL	3/1	12/70	12/70	----	1/74	----
2	M	AEL	8/9	9/66	1/72	----	6/75	9/76
3	F	ALL	8/9	12/66	5/70	2/75	9/75	----
4	M	AMML	11/10	5/64	10/64	----	3/76	1/77
5	F	ALL	17/9	5/60	11/62	----	2/78	----
6	F	ALL	7/10	5/70	3/74	----	3/78	----

ALL = Acute Lymphocytic Leukemia
AEL = Acute Erythracytic Leukemia
AMML = Acute Mono-Mylablastic Leukemia

Table 3

Comparison af Observed Number of Leukemia Cases in Rutherfard, New Jersey, January 1973 to March 1978, to Expected Numbers Based on Third National Cancer Survey and New York State Registry Data

Age Graup	Population Estimate	Observed No.	Expected No. 3rd National Cancer Survey	p Value	Expected Na. New York State Cancer Registry	p Value
<5	1182	1	.41	.336	.34	.288
5-19	4603	4	.61	.004	.68	.005
20-39	5532	5*	.61	<.001	.68	.001
		0	.66	.515	.85	.426
40-59	4974	1	2.16	.363	2.18	.360
60+	4413	5	10.14	.062	9.47	.090
		6*	10.14	.122	9.47	.168
Total	20,704	11	13.99	.261	13.52	.303
		13**	13.99	.466	13.52	.517

* Includes ane case with onset after moving from Rutherford
** Includes twa cases with onset after maving from Rutherford

New Jersey State Department of Health under National Cancer Institute funding to study bladder cancer.[3] Death certificates of all New Jersey residents filed on computer tape for the period 1962-1976, or any fraction thereof, can be analyzed with these programs. Population estimates were calculated by interpolating between the 1960 and 1970 census and by extrapolating for years subsequent to 1970.

Municipalities were ranked by age-adjusted mortality rate. Municipality rates for Rutherford and seven juxtaposed municipalities were compared to the overall state rate to determine the probability that the municipality rate exceeded the New Jersey rate. All municipalities also were ranked by the calculated probability value.

The question was raised as to the probability that a New Jersey elementary school would have zero, one, two, or three students with leukemia in a five-year period. To answer this question, we assumed that there are approximately 120,000 students in each elementary school grade in New Jersey, and that these students were equally distributed among 2,033 schools. Each school hypothetically would have 420 students in grades K-6. Assuming an average leukemia incidence rate of three per 100,000 per year, each school would expect 0.063 cases in five years. If a Poisson distribution is assumed, the probability of a school having zero cases is 0.94, one or more is 0.06, two or more is 0.002, three or more is less than 10^4, four or more is less than 10^6, five or more is less than 10^8. We

Table 4

Comparison of Observed Number of Hodgkin's Disease Cases in Rutherford, New Jersey, January 1973 to March 1978, to Expected Numbers Based on Third National Cancer Survey and New York State Registry Data

Age Group	Population Estimate	Observed No.	Expected No. 3rd National Cancer Survey	p Value	Expected No. New York State Cancer Registry	p Value
<5	1182	0	.01	.797	.02	.980
5-19	4603	2	.39	.059	.51	.094
20-39	5532	3	1.17	.113	1.60	.217
		4*	1.17	.031	1.60	.079
40-59	4974	0	0.97	.381	0.9	.395
60+	4413	3	1.54	.202	1.14	.107
Total	20,704	8	4.07	.055	4.20	.064
		9*	4.07	.024	4.20	.028

* Includes one case with onset after moving from Rutherford

stress that this analysis is a hypothetical situation that can give only a rough estimate of the probabilities involved as it does not take into account the nonhomogeneity in school size and students' shifting attendance between schools.

RESULTS

Leukemia: Thirteen cases of leukemia were confirmed, six in the age group 0-19 (Table 2) and seven over the age of 19. Disease incidence was significantly elevated only for the age category 5-19, whether or not the one case with disease onset after moving from Rutherford was included (Table 3). The location of the homes of the leukemia cases suggests a cluster among the leukemia cases less than 19 years of age, but not among the older cases (Figure 1). All school-age children with leukemia lived in the school district, which serves only 29 percent of the grammar-school-age population. A comparison using the binomial distribution demonstrated that this could occur with a probability of $p = 0.002$ by chance alone.

History of rubella vaccination was found to be the only variable significantly different between children with leukemia and a control group from Pierrepont School. Only two children with leukemia had been vaccinated for rubella (33 percent) compared with 24 controls (96 percent).

When leukemia cases were compared with the community controls, significantly more case families (three of six) reported having had trees treated in their yards than did controls (0 of 17) ($p = 0.01$). Several families of the cases reported high concentrations of "green dust" in their area. However, no significant case-control differences were found for "green dust" or for other environmental observations suggested by interviewees: rubber odor, perfume odor, and dying trees.

Interviews with school personnel identified no employee with a hematologic or lymphoproliferative malignancy and no use of toxic chemicals except for the infrequent use of small amounts of carbon tetrachloride in a well-ventilated classroom.

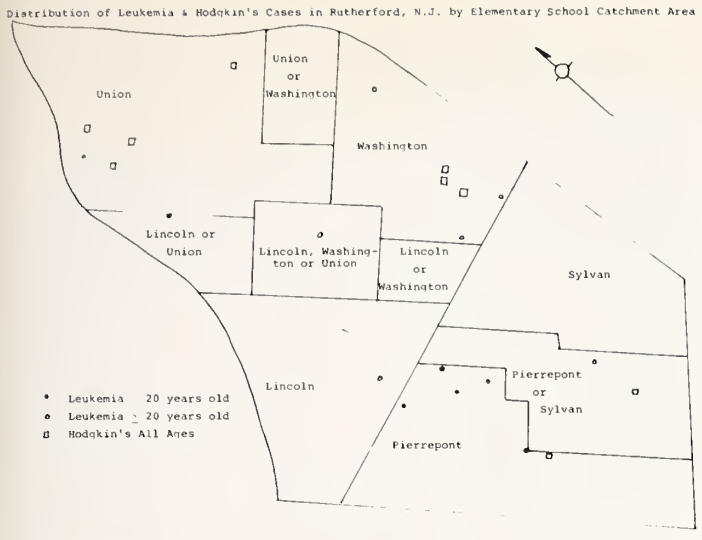
Analysis of classroom rosters found no grades or classroom assignments in common among the cases. Only two siblings of children with leukemia shared a common grade or class assignment. A further search for intercase relationships was hindered by adherence to the wishes of some case families that their identity not be revealed. However, it was noted that one case, before her onset of disease, was a babysitter for the family of another case, after his onset.

With respect to familial incidence of malignancy, we ascertained that one of the 24 grandparents of the leukemia children had Hodgkin's disease, while four of the 100 control grandparents had a similar malignancy (two leukemia, one lymphoma, and one Hodgkin's disease).

The duration of residence in Rutherford prior to disease onset was calculated for the five cases who were not born in Rutherford. Time periods ranged from 41 to 183 months (mean 94.6 months, 95 percent confidence limits 17 to 172 months). For controls not born in Rutherford, the duration of residence from in-migration to the onset age of each of the cases ranged from one month to 84 months (mean 46.7 months, 95 percent confidence limits 0 to 169.4 months). There was no significant difference in the number of childhood leukemia cases and the number of controls born in Rutherford. There is no time period shared by all cases making a single point-exposure event leading to all cases unlikely.

Hodgkin's disease: Nine cases of HD were confirmed. Using the Third National Cancer Survey incidence rates as the standard, we found that this incidence is significantly higher than expected for the 20-39 year age group, and for the total population if one former resident who was diagnosed after moving from town is included, but not for the other age strata (Table 4). Using New York State data, we found that Rutherford incidence is significantly higher for all age groups combined only when the one case in a former resident is included.

The geographic locations of the HD cases in Rutherford do not reveal clustering within the community, although there is some suggestion that the overall distribution consists



of two clusters of three with three other independent cases (see Figure 1).

Extensive interviews revealed variables with significantly different distributions between cases and controls. Three cases of HD were vaccinated within one year prior to onset (two influenza, one oral polio) compared with none of the controls ($p < 0.01$); five reported prior illnesses compared with two controls ($p < 0.01$). The illnesses among the HD cases were pneumonia (two), a myocardial infarction, rash, allergies, rheumatic fever, pyelonephritis, and mononucleosis. Five cases of HD reported prior history of tonsillectomy compared with four controls ($p < 0.01$). Fewer persons with HD (seven) reported prior diagnostic x-ray compared with controls (17) ($p < 0.02$).

Four of nine cases of HD reported having worked with "chemicals or toxins" compared to one of the controls ($p = 0.02$). The only common exposure was that two persons with HD were exposed to paint. Other exposures in cases included mercury, wool dyes, cyanide industrial metal polish, paint, and radar. Three persons with HD reported having birds as pets compared to zero controls ($p < 0.01$).

Non-Hodgkin's Lymphoma (NHL), Reticulum Cell Sarcoma, Lymphosarcoma, Multiple Myeloma: Eight cases of NHL, multiple myeloma, reticulum cell sarcoma or lymphosarcoma were confirmed, but the observed number did not differ significantly from the expected. In fact, fewer cases were observed than expected.

There is at present no mechanism to determine the completeness of case ascertainment in this study. Mortality data were available, and we chose to compare the mortality rates for cancer in general and for specific types of cancer for Rutherford and the seven surrounding municipalities: East Rutherford, Lyndhurst, Wallington, Nutley, Secaucus, Clifton, and Passaic. None of these municipalities were found to have a 1972-1976 age-adjusted leukemia mortality rate or an age-specific leukemia rate significantly greater than the state rate ($p = 0.03$) (Table 5). This probability placed it most significantly different from the state rate of those municipalities with rates that exceeded the state rate. In addition, looking at HD mortality, the age-adjusted rate for Rutherford for 1967-1971, based on four cases, was 3.27 per 100,000 population; and for 1962-1966, based on one case, 0.75. These five-year rates were not significantly different from the state rate. For all cancer (Table 6), only Wallington's 1972-1976 mortality rate was significantly in excess of the state rate.

DISCUSSION

Our investigation has confirmed that a significantly increased incidence of childhood leukemia had occurred in the Pierrepont School District of Rutherford, New Jersey. The investigation found significant differences in the number of rubella vaccinations and in possible contact with insecticides when the questionnaire data of leukemia cases and controls were compared.

The greater prevalence of rubella vaccination for the controls reflects the recently enforced mandatory school vaccination requirement. This would not have affected the leukemia cases to the same extent since only two are now in school, and the presence of leukemia may have exempted them from the vaccination requirement.

There was a significant difference in "trees treated" only when leukemia cases were compared with controls throughout Rutherford, not when the comparison was limited to control families selected from the school roster. This probably resulted from a greater frequency of elm and linwood trees in the Pierrepont School area than in the rest of town. Elm trees are sprayed with carbaryl (Sevin ™) for Dutch elm disease, and linwood trees are sprayed with malathion for leaf hoppers. These agents are not known to be human carcinogens and have been used widely without association

Table 5

Age-Adjusted Hodgkin's Disease Mortality Rates for Rutherford and Seven Surrounding New Jersey Communities, 1972-1976 with Ranks and Significance Levels of the Rates

Municipality	No. of Cases	Age-adjusted Rates	95% confidence interval of age-adjusted rate	Rank of Municipality by age-adjusted Rate	p-value∝	Rank of Municipality by Significance Level
Rutherford	6	4.32	1.18 – 7.46	43	0.03	1
East Rutherford	1	3.27	0.00 – 9.64	62	0.27	97
Lyndhurst	2	2.42	0.00 – 5.71	103	0.26	90
Wallington	1	2.92	0.00 – 8.60	82	0.29	113
Nutley	2	0.95	0.00 – 2.22	207	---	---
Secaucus	0	0.00	0.00 – 0.00	235	---	---
Clifton	7	1.71	0.40 – 3.02	156	0.28	103
Passaic	3	0.90	0.00 – 1.86	212	---	---
New Jersey	521	1.32	1.23 – 1.41	---	---	---

*1960 United States standard population rates expressed per 100,000 population

∝ Significance level of rates greater than state rate

Table 6

Age-Adjusted Mortality Rates for All Malignant Neoplasms for Rutherford and Seven Surrounding New Jersey Communities, 1972-1976 with Ranks and Significance Levels of the Rates

Municipality	No. of Cases	Age-adjusted Rates	95% confidence interval of age-adjusted rate	Rank of Municipality by age-adjusted Rate	p-value∝	Rank of Municipality by Significance Level
Rutherford	239	161.21	142.45 – 179.97	336	---	---
East Rutherford	102	194.40	159.61 – 229.19	152	0.08	124
Lyndhurst	240	180.62	159.49 – 201.75	223	0.15	168
Wallington	148	245.61	203.96 – 287.26	40	<0.01	21
Nutley	347	164.99	149.60 – 180.38	320	---	---
Secaucus	146	150.40	127.76 – 173.04	406	---	---
Clifton	968	160.72	151.43 – 170.01	340	---	---
Passaic	599	164.07	152.04 – 176.10	324	---	---
New Jersey	70,630	169.63	168.51 – 170.75	---	---	---

* 1960 United States standard population rates expressed per 100,000 population

∝ Significance level of rates greater than state rate

with increased leukemia incidence.[4,5] There is equivocal evidence for both agents of either carcinogenicity in animals or mutagenicity in test systems.

Why are the childhood leukemia cases clustered in one school district of Rutherford? The easiest explanation is that with 567 municipalities and 2,033 public elementary schools in New Jersey, Rutherford's experience, although unlikely, may have resulted from chance alone. This explanation cannot be proved and although no specific cause was found here, a number of specific causes for leukemia have been reported.

These include diagnostic[6,7], therapeutic[8,9], and other environmental[10] exposures to ionizing radiation, benzene exposure and poisoning in occupational settings[11-13] and alkylating agents.[14] Chromosomal abnormalities also have been firmly associated with an increased frequency in the incidence of this disease.[15] Other factors which are suggestively associated with leukemia incidence include an increase in incidence of congenital heart defects within the population at risk[16], familial predisposition[17,18], the HL-A2 antigen[19], sick pets[20,21], increased birth weight[22,23] poliomyelitis vaccine infected with SV40 virus[24], the occupation of the father in a hydrocarbon-related industry at the time of the child's birth[25], and nonionizing radiation such as microwaves[26]. Several studies present evidence for small population subgroups who are susceptible to leukemia, particularly children with asthma or other allergies and whose mothers had received intrauterine radiation.[27] Viruses also have been postulated as a cause of human leukemia, but studies have yet to support this condition.[28] The picture is complex at present and current evidence supports the multifactorial nature of the etiology of this disease.[29]

With respect to HD, incidence was significantly increased ($p < 0.05$) only when one former resident was included as a case. Mortality from HD was significantly increased during 1972-1976. The cases did not appear to be clustered.

Since there was no state tumor registry functioning during this period, we do not know if all cases in Rutherford residents have been found. Therefore, our data may represent an underestimate of incidence. On the other hand, if Rutherford has had a substantial turnover of population, the census estimates of population size for this period may underestimate the population at risk and thus lead to an overestimate of risk when we include cases with disease onset after moving from town in calculating a rate.

Analysis of overall cancer mortality experience for 1972-1976 suggests that Rutherford's experience is not significantly different from New Jersey's experience except for HD. These data are not inconsistent with the incidence data, because HD and leukemia mortality may not reflect morbidity over short time periods, and because identical time periods were not studied.

If we assume that a true increased incidence of HD has been identified, we must consider the significantly different histories of vaccinations, animal contact, chemical contact, x-ray use, prior illnesses, and tonsillectomy between cases and controls.

In this instance, the persons with HD had more vaccinations than did the controls; however, the data for cases was reported for the year prior to June, 1978. Consequently, some of the cases could have been affected by the National Influenza Immunization Program, but such a program did not occur in the year preceding June, 1978, and the controls were less likely to have positive vaccination histories from this source.

Only persons with HD reported having birds as pets, and four of nine persons with HD had some chemical contact, but to a variety of chemicals. A common exposure, paint, was evident in only two. These findings, while significant, may depend more on the lack of exposure in controls and to small numbers than to any real increase in risk.

Although the persons with HD suffered more illnesses and had undergone tonsillectomy more often than the controls, they received less diagnostic x-rays, a somewhat contradictory finding. The history of previous illness could represent either better or biased memory among the cases, or lower resistance to disease, but the diversity of illness suggests that in themselves these illnesses are probably not causally related to Hodgkin's disease.

No specific cause of Hodgkin's disease has yet been identified, although a transmissible agent has been postulated.[30] An association of Hodgkin's disease with tonsillectomy has been shown on a few occasions with risk ratios as high as 3.6 being found.[31,32]

One final comment: our approach in Rutherford was to ask families or next-of-kin about the patient's contact with a broad range of potential etiologic agents and to test the environment for the presence of potential carcinogens. Some

agents to be investigated were suggested by family members because they were especially worrisome, but in most instances such exposures could not be consistently associated with other cases. When such a large series of questions is asked and statistical comparisons made, one out of every 20 may have a significantly different distribution between cases and controls by chance alone and yet play no causative role.

While it is tempting to investigate each community with a confirmed cluster of a specific cancer, many such instances will occur by chance alone; the application of case-control methodology is inadequate where small numbers of cases exist and when the true etiology is apt to be a mosaic of causes, not just one agent. Clusters, then, are best viewed as a potential source of leads, not to be established or rejected by a small case-control study, but to be assessed in more appropriate analytic studies where adequate numbers of cases and controls can be assessed.

In summary, an excess of childhood leukemia and possibly of adult Hodgkin's disease was established in Rutherford. The available technology was unable to determine if this excess represented a chance event or a cause unique to Rutherford. Although we were not able to identify the causes of leukemia and Hodgkin's disease, our findings are similar to those in other published reports.

SUMMARY

In order to determine whether a reported increased incidence of leukemia and Hodgkin's disease in a neighborhood of Rutherford, New Jersey was a significant excess, the New Jersey State Department of Health conducted an epidemiologic investigation. Extensive case ascertainment was conducted in area hospitals. Incidence data were obtained from the New York State Registry and the Third National Cancer Survey and the expected numbers of disease cases in Rutherford were calculated based on these referents. Leukemia incidence was significantly elevated in the age group 5-19 and Hodgkin's disease incidence was elevated overall and specifically in the 20-39 age group.

A case-control interview study was then conducted. Leukemia cases were found to differ from their controls in the number of rubella vaccinations received and in their possible contact with insecticides. Significantly different histories of vaccination, animal contact, chemical contact, x-ray use, prior illnesses, and tonsillectomy were found among Hodgkin's disease cases than among their controls. However, the significant exposures could not consistently be associated with all cases.

Many apparent clusters will occur by chance alone. The available technology was unable to determine if the excess disease incidence represented a chance event or a cause unique to Rutherford.

REFERENCES

1. Cutler SJ, Young JL (ed.): *Third National Cancer Survey: Incidence Data.* U.S. Dept. HEW, PHS, Bethesda, Maryland. 1975.

2. Rothman KJ: Computer analysis for case-control studies with individual matching. *Int J Biomed Comput* 5:241-247, 1974.

3. Stemhagen A, Halperin W, Altman R, *et al:* An epidemiologic study of bladder cancer in New Jersey. Manuscript in preparation.

4. U.S. Dept. HEW: Criteria for a recommended occupational exposure to carbaryl. PHS, U.S. Dept. HEW, Washington, D.C., 1976.

5. U.S. Dept. HEW: Criteria for a recommended occupational exposure to malathion. PHS, U.S. Dept. HEW, Washington, D.C., 1976.

6. MacMahon B: Prenatal x-ray exposure and childhood cancer. *J Natl Cancer Inst* 28:1173-1191, 1962.

7. Stewart A, Webb J, Hewitt D: A survey of childhood malignancies. *Br Med J* 1:1495-1508, 1958.

8. Court-Brown WM, Doll R: Mortality from cancer and other causes after radiotherapy for ankylosing spondylitis. *Br Med J* 2:1327-1332, 1965.

9. Simpson CL, Hempelmann LH, Fuller LM: Neoplasia in children treated with x-rays in infancy for thymic enlargement. *Radiol* 64:840-845, 1955.

10. Brill AB, Tomonaga M, Heyssel RM: Leukemia in man following exposure to ionizing radiation: A summary of the findings in Hiroshima and Nagasaki, and a comparison with other human experience. *Ann Intern Med* 56:590-609, 1962.

11. Aksoy M, Safir E, Dincol G: Types of leukemia in chronic benzene poisoning. A study in thirty-four patients. *Acta Haematol* 55:65-72, 1976.

12. Infante PF, Rinsky RA, Wagoner JK, Young RJ: Leukemia in benzene workers. *Lancet* 2:76-78, 1977.

13. Vigliani EC: Leukemia associated with benzene exposure. *Ann NY Acad Sci* 271:143-151, 1976.

14. Reimer RR, Hoover R, Fraumeni J, Young RC: Acute leukemia after alkylating agent therapy of ovarian cancer. *N Engl J Med* 297:177-181, 1977.

15. Kessler II, Lilienfeld AM: Perspectives in the epidemiology of leukemia. *Advances in Cancer Research, Vol. 12.* Edited by Klein G, Weinhouse S, and Haddon A. New York, Academic Press, 1969.

16. Heath CW, Manning MD, Zelkowitz L: Case clusters in the occurrence of leukemia and congenital malformations. *Lancet* 2:136-137, 1964.

17. Gunz FW, Gunz JP, Veale AMO, Chapman CJ, Houston IB: Familial leukemia: A study of 909 families. *Scand Haematol* 15:117-131, 1975.

18. Gunz FW, Gunz JP, Vincent PC, Bergin M, Johnson FL, Bashir H, Kirk RL: Thirteen cases of leukemia in a family. *J Natl Cancer Inst* 60: 1243-1250, 1978.

19. Rogentine GN Jr, Yankee RA, Gart JJ, Nam J, Trapani RJ: HL-A antigens and disease: acute lymphocytic leukemia. *J Clin Invest* 51:2420-2428, 1972.

20. Bross IDJ, Gibson R: Cats and childhood leukemia. *J Med* 1:180-187, 1970

21. Bross IDJ, Bertell R, Gibson R: Pets and adult leukemia. *Am J Pub Health* 62:1520-1551, 1972.

22. Fasal E, Jackson EW, Klauber MR: Birth characteristics and leukemia in childhood. *J Natl Cancer Inst* 47: 501-509, 1971.

23. Wertelecki W, Mantel N: Increased birth weight in leukemia. *Pediatr Res* 7:132-138, 1973.

24. Fraumeni JF Jr, Ederer F, Miller RW: An evaluation of the carcinogenicity of simian virus 40 in man. *JAMA* 185:713-718, 1963.

25. Fabia J, Truong DT: Occupation of father at time of birth of children dying of malignant disease. *Br J Prev Soc Med* 28:98-100, 1974.

26. Baranski S, Czerski P: *Biological Effect of Microwaves.* Stroudsburg, PA, Dowden, Hutchinson, and Ross Inc, 1976.

27. Bross IDJ, Natarajan N: Leukemia from low-level radiation: Identification of susceptible children. *N Engl J Med* 287:107-110, 1972.

28. Gross L: The role of C-type and other oncogenic virus particles in cancer and leukemia. *N Engl J Med* 294:724-725, 1976.

29. Rapp F, Reed CL: The viral etiology of cancer: A realistic approach. *Cancer* 40:419-429, 1977.

30. Vianna NJ, Polan AK: Epidemiologic evidence for transmission of Hodgkin's disease. *N Engl J Med* 289: 499-502, 1973.

31. Gutensohn N, Frederick PL, Johnson RE, Cole P: Hodgkin's disease, tonsillectomy and family size. *N Engl J Med* 292:22-25, 1975.

32. Vianna NJ, Greenwald P, Davies JNP: Tonsillectomy and Hodgkin's disease: The lymphoid tissue barrier. *Lancet* 1:431-432, 1971.

We're not asking you for money.

Just a few words. To people who need us but don't know we exist.

We're Recording for the Blind. We're already helping more than 13,000 handicapped students. But there are a lot more out there who need our help.

You know who they are. In your work you come across students who are blind, dyslexic or physically unable to handle books. These are the students we help. Since they cannot read their textbooks, we do it for them. On tape. And we send the tapes to the students free of charge.

All we want you to do is tell eligible students about us. Have them contact: Student Services, RFB, Inc., 215 East 58th Street, N.Y., N.Y. 10022, (212) 751-0860. We'll take it from there.

It's such a little thing to ask.

Recording for the Blind is a non-profit organization. All contributions are tax-deductible.

Recording for the Blind, Inc.

an educational lifeline.

CASE REPORT

Tracheal Papillomatosis in an Asthmatic Presenting as Upper Airway Obstruction

F. D. FORTUNATO, M.D., P. BOLANOWSKI, M.D.,
R. CARNES, M.D., B. H. SAFIRSTEIN, M.D., Newark*

A patient with long-standing asthma with increasing dyspnea is described. She was found to have upper airway obstruction due to tracheal papillomatosis, which is rare in patients with asthma. This case report reviews diagnosis and treatment of this problem.

Squamous papillomatosis of the trachea is a rare affliction of unknown etiology, which has variable clinical presentations including upper airway obstruction. This report documents the value of the flow-volume loop in diagnosing and following upper airway obstruction due to tracheal papillomatosis.

CASE REPORT

A 53-year-old female was seen in the St. Michael's Asthma Clinic for progressive dyspnea, wheezing and hemoptysis. She had a five-year history of intrinsic asthma with negative allergy skin testing, normal IgE levels, and a negative family history of asthma, urticaria or eczema. Initial baseline pulmonary function study revealed a forced vital capacity (FVC) of 2.6 liters (79 percent of predicted) and forced expiratory volume in one-second (FEV_1) of 2.0 liters (68 percent of predicted). Significant reversibility by Vitalograph® was demonstrated after inhaled isoproterenol. Initial baseline flow-volume expiratory and inspiratory capacities showed no evidence of upper airway obstruction (Figure 1). She was maintained on oral prednisone, 10 mg. daily, and theophylline, and was examined four to six times per year. The FEV_1 values were stable until four months prior to admission when cough, progressive dyspnea at rest, irritability and hemoptysis were noted. Deterioration of the FVC and FEV_1, in the face of escalating doses of steroids and theophylline, was documented. On admission to the hospital the patient was in moderate respiratory distress at rest. The respiratory rate was 24 per minute with minimal audible stridor. Physical examination was significant only for bilateral inspiratory and expiratory wheezes. Spirometry revealed an FEV_1 of 0.9 and FVC of 1.5 liters with no reversibility. A flow-volume study (Figure 2) demonstrated marked flattening of the expiratory and inspiratory phases consistent with fixed intra-thoracic upper airway obstruction.

Tracheal tomography revealed multiple polypoid lesions four cm. below the vocal cords (Figure 4). Chest x-ray, CBC, SMA-12, electrolytes, and urinalysis were within normal limits. Arterial blood gas studies revealed Ph 7.46; Pco_2 38; PO_2 78 while breathing room air.

Flexible fiberoptic bronchoscopy clearly demonstrated multiple polypoid, gelatinous, friable lesions diffusely involving the entire inner circumference of the trachea. The effective tracheal orifice was less than 0.5 cm^2 in diameter. Biopsy demonstrated squamous papillomas (Figure 5); complete resection was performed through a rigid bronchoscope restoring the original tracheal cross-section area. Marked subjective improvement occurred immediately after

*This study is from the Saint Michael's Medical Center in Newark where Dr. Fortunato is Director of the Intensive Care Unit; Dr. Bolanowski, Attending Cardiothoracic Surgeon; Dr. Carnes, Director of Pathology; and Dr. Safirstein, Director of Pulmonary Medicine. Correspondence may be addressed to Dr. Fortunato at the Medical Center, 268 High Street, Newark, NJ 07102.

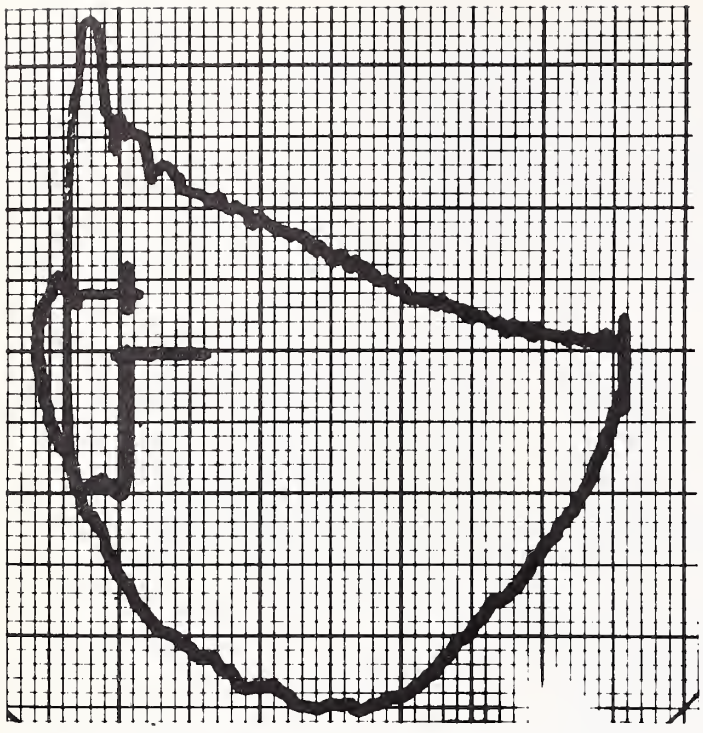


Figure 1—Initial flow-volume loop demonstrating no evidence of upper airway obstruction.

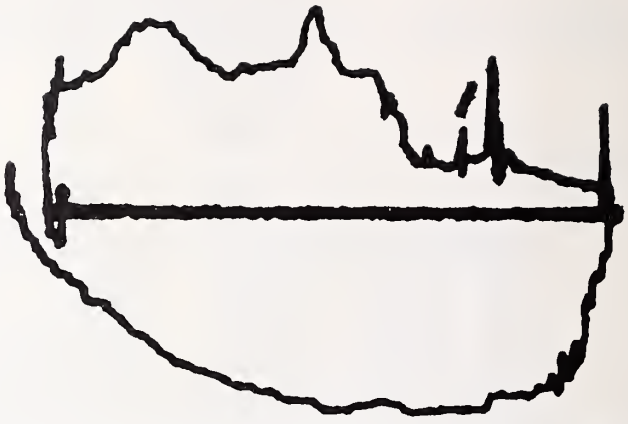


Figure 2—Flow-volume loop demonstrating marked flattening of the expiratory and inspiratory phases.



Figure 3—Flow-volume loop after resection of polyps demonstrating no evidence of upper airway obstruction.



Figure 4—Tracheal tomogram revealing polypoid lesions.

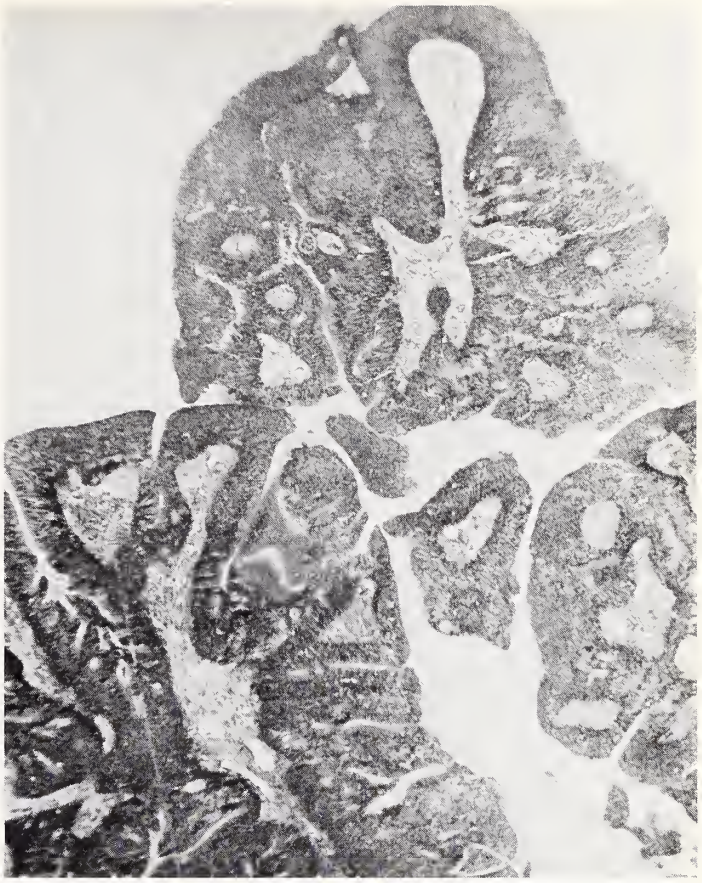


Figure 5—Low power (x450) light microscopy demonstrating squamous tracheal papillomatosis.

bronchosopy. The FEV_1 rose to 1.9 liters and the FVC to 2.3 liters; the flow-volume capacities (Figure 3) again resumed the original pattern as seen in 1974 (Figure 1).

DISCUSSION

To our knowledge, this is the second reported case of tracheal squamous papillomatosis associated with asthma.[4] The diagnosis of upper airway obstruction in patients with long-standing asthma is difficult. In our patient progressive dyspnea and deterioration in her FEV_1 and FVC initially were thought to be due to worsening asthma for which the dosages of oral steroids were increased.

The measurement of expiratory and inspiratory capacities utilizing flow-volume relationships demonstrated fixed intrathoracic obstruction which led her physician to obtain tracheal tomography and to perform fiberoptic bronchoscopy.

Squamous papillomatosis of the trachea is a rare disorder in adults whose clinical manifestations of cough, wheezing, and dyspnea may lead to a mistaken diagnosis of asthma or obstructive lung disease. Hemoptysis and recurrent pneumonitis have been reported[4,5]

The condition generally is benign, however, malignant degeneration has been reported.[3] Reports of frequent recurrence and intra-bronchial spread following resection are well documented.[2,3]

The etiology of squamous papilloma is unknown, however, viral infections, cigarette smoking, and previous tracheostomy have been considered.[2,4] Our patient had no prior history of surgical manipulation of the trachea.

CONCLUSION

The importance of suspecting upper airway disorders in all patients who wheeze is emphasized by this case report.

REFERENCES

1. Al-Saleem T, Peale AR, Norris CM: Multiple papillomatosis of the lower respiratory tract. *Cancer* 22:1173-1184, 1968.
2. Ogilvie OE: Multiple papillomas with malignant degeneration: Two cases. *Arch Otolaryn* 58:10-18, 1963.
3. DiMarco AF *et al:* Papillomas of the tracheobronchial tree with malignant degeneration. *Chest* 74:464-465, 1978.
4. Khan MA *et al:* Tracheobronchial papillomatosis. *NY State J Med* 77:2073-2077, 1977
5. Kaufman G, Klosptock L: Papillomatosis of the respiratory tract. *Am Rev Respir Dis* 88:839-846, 1963.

Practice what we teach

Today there are over 31 million men, women and children suffering from the many forms of arthritis and related rheumatic diseases. And there just aren't enough trained rheumatologists to help them.

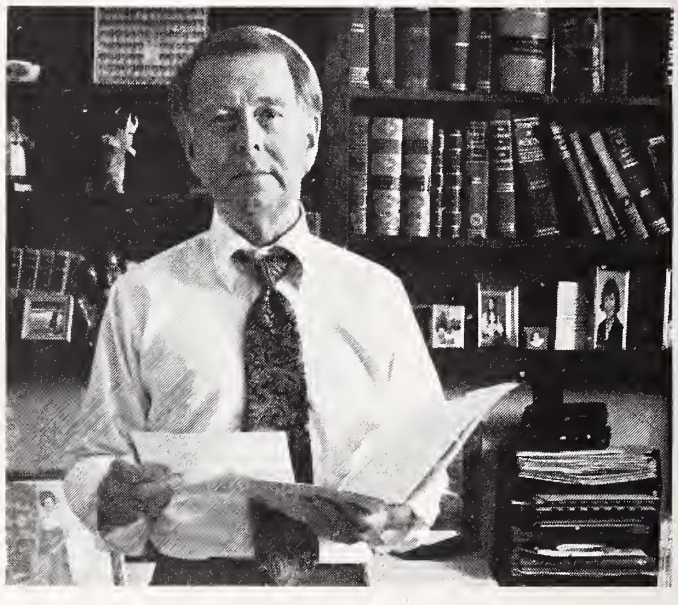
That's why arthritis sufferers need your help.

They must depend heavily on the family practitioner for better diagnosis, more effective patient treatment.

Contact your local Arthritis Foundation chapter for the latest information on arthritis. This includes continuing educational seminars by leading rheumatologists, scientific meetings, "outreach" programs—as well as the "Bulletin on the Rheumatic Diseases," "Arthritis and Rheumatism Journal," "Primer on the Rheumatic Diseases," audio cassettes and other professional materials. Free disease handbooks and medication pamphlets are also available to patients.

Please. Let us help your practice with what we teach.

The Arthritis Foundation helps doctors help.



ARTHRITIS FOUNDATION

A public service of this magazine

SPECIAL ARTICLE

Physicians and the DRG Model

PAUL L. GRIMALDI, Ph.D., Princeton*

Physicians generally have shown little interest in the economic and statistical foundations of the case-mix method of hospital reimbursement scheduled for implementation in New Jersey this year. Nevertheless, the radical departure from the traditional per diem method may affect the quantity and quality of services patients receive, and may try to standardize medical practice vis-à-vis regulatory decisions. Furthermore, the model implicitly requires additional physician concern with administrative matters and cost effectiveness; it even may yield information useful in the prosecution of malpractice suits.

In a recent "Report from the Foundation," Dr. Daniel O'Regan reserved judgment about the efficacy of the DRG prospective rate-setting model pending the accumulation of sufficient information.[1] This appears to have been a wise decision because of the model's untested nature and heavy reliance on unevaluated assumptions and data of varying quality.[2] Only time will tell whether this new model is more successful than its predecessors in providing equitable reimbursement for quality care furnished in an effective and efficient manner.

Most physicians, as Dr. O'Regan noted, have shown little interest in the economic and statistical foundations of the DRG approach to reimbursement. Nevertheless, this new approach may affect the quantity and quality of services patients receive, and may try to standardize medical practice vis-à-vis regulatory decisions. Furthermore, the model implicitly requires additional physician concern with administrative matters and cost effectiveness; it even may yield information useful in the prosecution of malpractice suits.

PATIENT CHARTS

The DRG method makes it imperative for doctors to complete patients' charts in a timely and accurate manner because reimbursement is based on diagnoses reported on medical record abstracts rather than the traditional length of stay. If the charts are late, hospitals may incur serious cash flow problems; if diagnoses are incorrect, unclear or omitted, hospitals are not likely to be reimbursed properly. Omission of a secondary diagnosis, for example, may cost a hospital tens of thousands of dollars.

Since hospitals—not doctors—are at risk for data-reporting problems, some administrators might attempt to expedite matters by suspending doctors' privileges until the charts are completed or scale fines according to the length of time the charts are outstanding. In any event, problems relating to the timeliness and accuracy of the charts may strain relationships between physicians and administrators.

GROUPING PATIENTS

Another critical issue is whether patients are categorized into "medically meaningful" homogeneous groups. If the groups are not homogeneous, payment rates may be inequitable and not cover necessary services. The present method of grouping patients was established at Yale University with input from Connecticut physicians. Essentially, patients are partitioned into DRGs according to their diagnoses, age, and surgical procedures. (Patients with unusually long or short lengths of stay are isolated statistically.) Whether New Jersey physicians would have grouped patients differently or developed exactly 383 groups is now an academic issue. New Jersey doctors, however, have an opportunity to play a vital role in the formation of DRGs in the future since the Health Department plans to regroup patients in 1980 according to

*Dr. Grimaldi is Director of Health Economics—Research Service, New Jersey Hospital Association, Princeton. He may be addressed at 760 Alexander Road, CN1, Princeton, NJ 08540.

Table 1
Hypotheticol Cost Per Cose ond Averoge Length of Stoy for Potients in DRG XX in Hospitol YY

Physician	Number of patients	Average length of stay	Total diagnostic and therapeutic ancillary costs	Lab	Central supply	Pharmacy
A	10	12.1	$361	$150	$165	$46
B	18	10.6	309	175	95	39
C	15	11.6	333	200	120	13
D	7	13.5	420	240	160	20
E	25	10.0	410	140	190	80
Subtotal	75	11.1	$365	$171	$147	$47
F	6	7.5	$153	$ 75	$ 60	$18
G	12	6.0	122	60	50	12
H	16	6.0	155	100	30	25
I	3	9.8	230	110	95	25
J	11	4.9	181	90	75	16
K	1	5.0	226	120	100	6
L	5	7.4	232	75	135	22
M	11	8.0	147	35	100	12
N	28	7.0	130	60	55	15
O	32	6.8	160	65	85	10
Subtotal	125	6.7	$155	$ 70	$ 70	$15

Panel A

Computation of Payment Rate for Direct Patient Care

Dispersion around the average cost of each patient in a DRG is measured by the coefficient of variation, which equals the standard deviation of the equalized cost per case divided by the equalized cost per case. Half the difference between one and the coefficient is the weight for the standard cost. The difference is called the degree of confidence. The weight for a hospital's own cost is the difference between one and half the degree of confidence. The following example helps clarify this computation.

> Payment Rate = amount for hospital-based physician services + [1-½ (degree of confidence)] × hospital non-physician direct cost per case + ½ (1-coefficient) × standard non-physician direct cost per case

Example: a hospital averages $700 in non-physician costs to treat patients in a given DRG and $200 in physician costs for a total of $900. The standard for non-physician costs is $500. The coefficient of variation is 0.70; the degree of confidence, 0.30. The hospital receives $870 for this case [$870 = $200 + $(1 - \frac{.30}{2}) \times (\$700) + \frac{(1 - .70)}{2} \times (\$500)$].

If, however, the hospital's average cost was $300, the payment rate would be $530. [$530 = $200 + $(1 - \frac{.30}{2}) \times (\$300) + \frac{(1 - .70)}{2} \times (\$500)$].

In the first part of the above example, a hospital lost $30 ($900-$870) for a patient in this DRG since the cost of treatment exceeded the payment rate. In the second part, however, the hospital has a net income of $30 ($530-$500) for the patient since payment exceeds cost.

Source: *The DRG MAZE.* Princeton, New Jersey, New Jersey Hospital Association, 1979, p. 7.

ICD-9-CM. Physician input will help to ensure the homogeneity of the groups and their conformity to medical practice in New Jersey.[3]

STANDARD COSTS

The DRG model uses standard (average or norm) costs to calculate payment rates. As Panel A suggests, the greater the emphasis on the standard, the greater the possibility of physicians and administrators disagreeing over treatment modalities, especially if standard cost falls below actual cost. Administrative concern with solvency ensures conflict and undoubtedly will raise questions about designing incentives for physicians to change their medical practice to more closely approximate standard costs. Certainly there will be many cases where doctors repudiate norms, focusing instead on individual patient needs. Furthermore, patients are not likely to want their physicians functioning as efficiency experts in matters pertaining to their health.

The present DRG model does not penalize financially "inefficient" doctors—those whose treatment plans are more costly than the standards. Since physicians have primary control over the allocation of hospital medical resources, a good case can be made that any reimbursement scheme ignoring this reality probably will not be very successful in minimizing costs, and, additionally, places administrators in an unenviable position since they are responsible for a hospital's financial stability. To encourage doctors to produce care differently and concurrently to alter the prevailing internal organization of a hospital, government might some day consider incorporating within the DRG (or other reimbursement) model a requirement that doctors be held accountable for a portion of excess cost. Similarly, administrators might be more inclined to approve requests for new equipment and staff if made by "efficient" physicians. Also, PSROs may use DRG data to exert pressure for change, both in terms of cost containment and quality improvement.

To simplify comparisons of the cost implications of the different ways New Jersey physicians practice medicine, the Health Department may provide administrators and PSROs with reports detailing costs by ancillary services. These reports will enable medical directors, administrators, and physician peer review groups to identify the sources of costing differences between physicians.

Table 1 shows hypothetical costs associated with how 15 doctors treat 200 patients classified into a particular DRG in an unknown hospital. It is immediately obvious that the doctors can be divided into two groups. The first consists of five physicians caring for 75 patients at an average ancillary

cost of $365 and a mean length of stay of 11.1 days. The comparable figures for the second group are substantially lower—$155 and 6.7 days. Analysis of the cost patterns suggests that physicians A and E order noticeably more pharmaceuticals and central supply services than their peers, while C and D use more laboratory services. Conversely, physicians G, M, and N order substantially less expensive services than other doctors. If nothing else, such wide disparities probably will generate analytical attempts to explain them, perhaps to determine whether they are related to quality and need.

To question the validity of their cost performance rating better doctors must be informed about the statistical interpretation of the standards. Are the standards statistically reliable or does small sample size or other empirical limitations negate their meaningfulness? In cases where a physician treats a large number of patients, the performance rating may be misleading if a given DRG does not consist of homogeneous patients. In situations where a doctor exceeds a standard but treats only a few patients, comparisons with the standard may be of dubious value. But if a doctor consistently exceeds the standard for specific ancillary services, PSROs or others might decide his/her treatment plans are not cost effective unless, perhaps, there is a corresponding underutilization of substitute ancillary services.

QUALITY

Physicians are concerned with whether standard costs embody sound medical judgments and reflect the care patients need. The standards for 1980 are the product of a battery of statistical assumptions and services provided in 1978. In all likelihood, numerous patients received the services they needed in 1978; others probably received too much care. Some patients, perhaps because of a shortage of nurses or stringencies in State reimbursement policies, may not have received needed care. Indeed, an absence of a sufficient number of nurses may explain partly why one Health Department study found that for many DRGs age and minutes of nursing care received were correlated negatively—that is, older people received fewer minutes of nursing care than their younger counterparts.[4]

ADMITTING PATIENTS

The DRG model also may affect where physicians can admit patients. According to the second annual report of the DRG project, successful implementation of the model would enable the Health Department to specify "the case-mix a hospital *should* treat."[5] Hospitals judged efficient in treating certain cases might, therefore, through the planning process directly or rate-setting process indirectly, be prevented from treating certain cases. As a result, doctors would have fewer hospitals to which to send their patients, the number dependent on assumptions embedded in the DRG model.

MALPRACTICE SUITS

DRG data may play a crucial role in malpractice suits insofar as they serve as indicators of medical practice in particular communities. Assume, for example, a doctor prescribes less care than is implied by the standard cost per case, a perfectly plausible outcome for certain patients since a standard is an average. Litigious patients might use the shortfall to support malpractice claims. Conversely, doctors providing services at least equivalent to a standard might justify their actions by references to state averages. Juries, however, might be prone to decide against a doctor on the ground the plaintiff was actually a patient on the high side of the standard or higher than diagnosed. In other words, a standard may not be applied symmetrically in legal proceedings—services below a standard may be perceived as evidence of malpractice; services exceeding a standard, as insufficient for the plaintiff's needs. The result of a quantifiable standard may, therefore, be an acceleration in the practice of defensive medicine.

CONCLUSION

Case-mix reimbursement may rectify the present inability of existing rate-setting programs to make appropriate allowances for patient needs. The DRG model is likely to have limited success, however, unless there is widespread physician input and cooperation. Physician participation will probably increase in the future as more doctors feel the regulatory impact of the Health Department's new approach to hospital reimbursement.

REFERENCES

1. O'Regan J: Report from the foundation. *J Med Soc NJ* 76:618, 1979.

2. Commenting on the findings of a sample study questioning the reliability of the abstracts, the Department of Health data analysis unit concluded:

"Although the ratio of one in four erroneous Principal Diagnosis coding/identifications is comparable to other states where such studies have been conducted, it is an unacceptable standard to the hospitals and to the New Jersey State Department of Health. Obviously, quality improvement must be made.

"This 26.4 percent discrepancy ratio will have an adverse effect regarding when Principal Diagnosis is used in any program or for any type of analysis. It is essential, therefore, to improve the quality of the data entered on the discharge abstracts. Without improved quality (accuracy) the hospitals, the Department of Health and other major users will not be able to obtain a truly accurate data base from which to draw sound analysis with meaningful results. Likewise, the high error rate could have an adverse effect on the patient case mix rate-setting system. This fact is recognized as a need for positive action." See: "A technical report on the study of hospital data collection problems," New Jersey State Department of Health (May 1979), p. 1.

3. Several New Jersey doctors already have expressed concern with the grouping of psychiatric patients. Some argue that current medical practice combined with the indeterminancy of patient needs, precludes applying case reimbursement to these patients. Today there are only a few DRGs for patients with a psychiatric diagnosis and special allowances are not made for hospitals with psychiatric units.

4. *A Prospective Reimbursement System Based on Patient Case-Mix for New Jersey Hospitals, 1976-1983,* Second Annual Report, vol. 2, New Jersey State Department of Health, 1978.

5. *A Prospective Reimbursement System Based on Patient Case-Mix for New Jersey Hospitals, 1976-1983,* Second Annual Report, vol. 1, New Jersey State Department of Health, 1978, p. 301.

214th Annual Meeting
Medical Society of New Jersey
May 10-13, 1980

HOUSING APPLICATION

THE MEADOWLANDS HILTON

PLEASE RESERVE: ____ SINGLE ____ DOUBLE ____ TWIN ____ SUITE

ARRIVAL: (DATE) _____ AT (TIME) _____

DEPARTURE: (DATE) _____ AT (TIME) _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

IF DOUBLE OR TWIN, NAME OF PERSON JOINING _____

Singles: $50
Doubles: $60

Executive Singles: $75
Executive Doubles: $95
Suites: $150 and up

If range of rates is offered and rate requested is not available, the next available rate will be assigned. Reservations must be received not later than two (2) weeks prior to the opening date of your meeting and will be held until 6 p.m. on day of arrival unless otherwise specified.

(New Jersey Sales Tax—5%)

Complete and mail this application directly to:

Front Office Manager
The Meadowlands Hilton
Two Harmon Plaza
Secaucus, New Jersey 07094

Confirmation will be received directly from the hotel.

A limited number of rooms also will be available at the following hotels.

For information call directly:

Saddle Brook Marriott Hotel	201-843-9500
Holiday Inn, North Bergen	201-348-3600
Holiday Inn, Lyndhurst	201-933-9800

214th Annual Meeting
May 10-13

Meadowlands Hilton Hotel—Secaucus

(See housing application—p. 282, this issue)

DAILY SCHEDULE

Friday, May 9, 1980
3:30 p.m.—Board of Trustees

Saturday, May 10, 1980
8:00 a.m.—Registration Opens
9:00 a.m.—Message Center Opens
10:00 a.m.—Rule 4:21 Panel Session
11:30 a.m.—Meeting—NJ Committee on Trauma
12:00 noon—Exhibits and Coffee Lounge Open
12:00 noon—Luncheon—NJ Committee on Trauma
1:00 p.m.—Annual Spencer T. Snedecor Trauma Oration
2:00 p.m.—House of Delegates
3:30 p.m.—Reference Committee Meetings:
"A", "B", "D", "G", Constitution & Bylaws

Sunday, May 11, 1980
7:30 a.m.—Scientific Session on Dermatology
8:00 a.m.—Registration Opens
8:30 a.m.—Scientific Session on Oncology
9:00 a.m.—Message Center, Exhibits and Coffee Lounge Open
9:00 a.m.—Scientific Sessions:
Allergy, Otolaryngology
Emergency Medicine
Neurosurgery and Neurology
Ophthalmology
Psychiatry, Family Practice
10:00 a.m.—Reference Committee Meetings:
"C", "E", "F", "H"
12:00 noon—Luncheon—NJ Dermatologic Society
1:00 p.m.—Scientific Sessions:
Anesthesiology
Cardiovascular Diseases
Nuclear Medicine
Obstetrics and Gynecology
Plastic and Reconstructive Surgery
3:00 p.m.—House of Delegates
4:30 p.m.—Widows and Orphans Society
6:30 p.m.—Inaugural Reception Honoring President-Elect and Mrs. Baker
Hosts—MSNJ and Morris County Medical Society
All members, official guests, and their wives, and Auxiliary members are cordially invited
—Tickets $5 per person
8:00 p.m.—Inaugural Dinner
Hosts—MSNJ and Morris County Medical Society
Music and Dancing—Phil Bennett and his Orchestra—Tickets $35 per person

Monday, May 12, 1980
7:00 a.m.—JEMPAC Breakfast
8:00 a.m.—Registration Opens
9:00 a.m.—Message Center, Exhibits and Coffee Lounge Open
9:00 a.m.—Scientific Sessions:
Chest Diseases, Pediatrics
Family Practice, Medicine, Radiology, Urology
Orthopaedic Surgery, Rheumatism
Surgery, Clinical Pathology
NJ Foundation for Health Care Evaluation
12:00 noon—Luncheon—NJ Orthopaedic Society
1:00 p.m.—Scientific Sessions:
Gastroenterology and Proctology
Physical Medicine and Rehabilitation
3:00 p.m.—House of Delegates
3:00 p.m.—Exhibits and Coffee Lounge Close
5:00 p.m.—Message Center Closes
6:00 p.m.—JEMPAC Wine and Cheese Reception

Tuesday, May 13, 1980
7:15 a.m.—Breakfast-Meeting of the Coalition of Southern NJ County Medical Societies
Breakfast-Meeting of the Essex County Medical Society
7:30 a.m.—Breakfast-Meeting of the Bergen County Medical Society
8:30 a.m.—Registration Opens
9:00 a.m.—House of Delegates
12:00 noon—Registration Closes
2:00 p.m.—Annual Meeting—Board of Governors of MIIE
3:00 p.m.—Board of Trustees' Meeting

NUTRITION UPDATE

Dietary Fiber

THE INSTITUTE OF FOOD TECHNOLOGISTS' EXPERT PANEL ON FOOD SAFETY AND NUTRITION AND THE COMMITTEE ON PUBLIC INFORMATION, Chicago*

The role played by fiber, or "roughage" as our grandparents called it, in health and disease has become the subject of increased public attention. Until recently, nutritionists largely ignored dietary fiber since it neither was digested, absorbed nor metabolized by the body and passed directly through as human waste. Interest was stirred, however, when it was discovered that rural Africans, whose diets were high in fiber, seemed to have a lower incidence of certain diseases than people living in highly developed countries consuming low-fiber diets.[1]

WHAT IS DIETARY FIBER?

Traditionally, fiber has been discussed in terms of "crude fiber," which is simply the residue after a food sample is treated in the laboratory with a solvent, hot acid and hot alkali. This chemically inert residue is composed primarily of the lignin and most of the cellulose in the food being analyzed.

"Dietary fiber," on the other hand, is defined as including all the components of a food that are not broken down by enzymes in the human digestive tract. Dietary fiber includes hemicelluloses, pectic substances, gums, mucilages and certain other carbohydrates, as well as the lignin and cellulose that constitute crude fiber.

The use of "crude fiber" in human dietary descriptions is thus of limited value, since it may represent as little as one-seventh of the total dietary fiber of the food. Even the word "fiber" itself is misleading, since not all the components of "dietary fiber" are fibrous in the usual physical sense, while foods that do contain recognizable fibers, such as muscle meats, do not yield undigestible residue.

ALLEGED BENEFITS

A number of physiological claims have been made for dietary fiber. The evidence underlying these claims varies. Some are theoretical, some come from direct human studies, some from animal experiments, and others from epidemiological studies—studies in which observations have been made on different population groups and attempts made to correlate various disease statistics with local dietary factors.

Fiber is of definite value for some conditions and may or may not be of value for others:

• **Constipation**—Fiber is of value in relieving constipation because of its ability to increase the water content of the feces, producing bulkier, but soft, well-formed stools. This, in turn, leads to a transit time in the gastrointestinal tract which is intermediate between being too rapid, causing diarrhea, and too slow, causing constipation.

It has been proposed that the increased volume and softness of the stools, by reducing straining during defecation, is a factor in preventing hemorrhoids and varicose veins, but the experimental evidence for this claim is limited.

• **Diverticulosis**—Fiber is of probable value in treating diverticulosis. Until recently, the standard medical treatment for this malady was a low-residue diet, on the presumption that such a diet would allow healing and cause less irritation to the bowel. Now, however, it is treated with a high-fiber diet with good results. This supports the hypothesis that the disease results from a dietary fiber deficiency, although it does not prove it.

Laboratory studies have shown that rats fed a fiber-free diet develop diverticulosis, while those fed a fiber-containing control diet do not. Also, a fiber-containing diet has been used to cure diverticulosis in rats.[2]

• **Cardiovascular Diseases**—A diet high in dietary fiber may lower blood (serum) cholesterol levels by reducing the transit time through the gastrointestinal tract, leading to decreased absorption of dietary cholesterol. It also may reduce serum cholesterol by another mechanism. Bile acids, which are derived from the body's cholesterol, emulsify fats and oils during digestion and thus permit their absorption from the intestine. People on certain high-fiber diets excrete more bile acids, sterols and fat; this implies that the fiber compounds "bind" bile acids, and thereby prevent absorption of cholesterol and fat and also the re-absorption of bile acid. The body therefore draws on its cholesterol stores to synthesize more bile acid, presumably lowering the serum cholesterol level.[3]

However, although high serum cholesterol levels have been identified as one of the risk factors in atherosclerosis, there is disagreement as to whether the actual risk can be reduced by lowering cholesterol levels by means of diet or drugs.

Also complicating the matter are the inconsistent effects produced by dietary fiber from different foods. Adding rolled oats, barley, pectin, or alfalfa, and possibly lignin, to

*Reprinted with permission of *Contemporary Nutrition* 4:9 (September) 1979, a newsletter from the Nutrition Department of General Mills, Inc., Minneapolis. This article was condensed by Neil H. Mermelstein, Associate Editor, *Food Technology*, from a Scientific Status Summary by the Expert Panel on Food Safety and Nutrition and the Committee on Public Information of the Institute of Food Technologists, 221 North LaSalle Street, Chicago 60601.

the diet reduces serum cholesterol in animals and/or man; whereas the effect of adding whole wheat is variable and bran does not appear to affect serum lipids.[4-7]

• **Cancer**—Some health professionals hypothesize, on the basis of epidemiological studies, that dietary fiber may provide protection from cancer of the colon and the rectum. The more rapid movement of the feces which occurs with a high-fiber diet may allow less time for any carcinogens present in the colon to initiate cancer. Also, the extra water, bile acids, salts and fat bound by the added fiber may act as solvents to remove chemicals which might be carcinogenic. In addition, a high-fiber diet may alter the type and number of microorganisms in the colon and possibly inhibit their production of potential carcinogens.[8,9]

However, epidemiological studies can be misleading. For example, the incidence of colon cancer in different countries and cultures correlates much better with the consumption of fat than with the consumption of fiber.[10,11] There is no proved relationship between bowel transit time and the incidence of colon cancer; no proof that constipation leads to cancer; and no proof that dietary fiber per se has a definable effect on the intestinal flora of man.[12]

• **Diabetes**—In one study blood-sugar levels of patients taking insulin were significantly lower on a high-fiber diet than on a low-fiber diet.[13] While this preliminary observation is of interest, diabetics should not change to a high-fiber diet without the advice of a physician.

• **Appendicitis**—This disease has been linked to low-fiber diets in some epidemiological comparisons but other data fail to support this hypothesis. For example, the incidence of appendicitis in the U.S. decreased by 40 percent in the last 20 years, while fiber intake has been falling.

• **Weight Loss**—Preliminary studies indicate that high-fiber foods may help promote weight loss. High-fiber breads frequently contain fewer calories per pound than standard breads, and they could also simply reduce food consumption because of an increased feeling of satiety.

• **Other Conditions**—Certain plant fibers appear to have a detoxifying effect when fed along with various drugs and chemicals but further study is required.[14] On the other hand, there is little evidence linking dietary fiber with such disorders as hiatal hernia, deep-vein thrombosis and phlebitis.

In considering epidemiological evidence linking specific diseases to diet, one must remember that many changes in lifestyle and the environment occur simultaneously with changes in the diet and might themselves cause or influence the course of these diseases. In addition, people eating a low-fiber diet are generally also consuming increased amounts of refined carbohydrates, fats and animals products. It is just as logical, epidemiologically speaking, to attribute these diseases to the *presence* of these other materials as it is to the absence of fiber. Conversely, high-fiber diets also may be high in essential nutrients; thus, it could be the presence of these other nutrients that produces any beneficial effects.[15]

FOOD SOURCES OF FIBER

Results of feeding "high-fiber diets" differ from researcher to researcher. One explanation may be the relatively poor analytical methods available for determining fiber data. Another explanation, however, is that since different fiber components have very different physiological functions, and fiber composition differs with the food source, the physiological effects noted will depend on the predominant type of fiber consumed.

A wide variety of foods supply significant amounts of dietary fiber (Table I), including all of its various components.[16] Grain products and nuts are good sources of dietary fiber, and fruits and vegetables supply significant amounts of fiber if consumed in fairly large quantities.

The lignin content of most vegetables is very low while that of fruits is highest in those containing lignified seeds, (e.g., the strawberry) or lignified cells in the flesh (e.g., the pear). The noncellulosic polysaccharides in these foods are usually rich in pectic substances (uronic acids) and in the so-called five-carbon sugars (pentoses).

Substitution of whole wheat flour for white flour provides increased lignin in total diet, as well as a three-fold increase in total dietary fiber from that foodstuff and a twelve-fold increase in noncellulosic pentosans (polymers of five-carbon sugars).

A number of bakeries have developed breads which contain six to eight percent crude fiber,[17] roughly four times as much as in whole wheat bread. Powdered food-grade cellulose is the fiber component added to these products.

Table 1
Total Dietary Fiber in Some Fruits, Vegetables and Wheat Products[16]

Food	*Total Dietary Fiber (g/100g fresh basis)*
Cabbage, cooked	2.83
Carrots, cooked	3.70
Peas, frozen, raw	7.75
Tomato, raw	1.4
Apple, flesh only	1.42
Banana	1.75
Pear, flesh only	2.44
Plum, raw, flesh and skin	1.52
Strawberry, raw	2.12
White flour (72%)	3.45
Brown flour (90-95%)	8.70
Whole wheat flour	11.0
Bran	48.0

CAN YOU GET TOO MUCH?

Consumption of as much as ten tablespoons of bran per day, in addition to the regular diet, has been recommended in some regimens. Such large intakes may cause diarrhea and other digestive complaints. Too much pectin may decrease vitamin B_{12} absorption. High-fiber diets may also result in a significant loss of minerals, particularly zinc, iron, calcium, copper and magnesium, as a result of binding of these minerals by the phytic acid present in certain plant-based foods.

Also, fiber, by its sheer bulk, may reduce the total amount of food consumed, thereby resulting in a deficiency of certain nutrients and even, in some cases, of needed calories. Very large amounts of fiber could even cause enlargement and twisting of the sigmoid colon and aggravate ulcerative colitis.[18]

MODERATION RECOMMENDED

From 1909/1913 to 1965, the daily crude fiber content of the average American diet decreased from about seven grams to about five grams. Whether increasing the daily consumption of crude fiber by two grams to get it back to the earlier level could be expected to have the same effect on health as an increase to the higher level of 25 grams suggested by the difference between African and American diets is an unanswered question.[19,20]

It may be that changes in the consumption patterns for fruits and vegetables and grain products over the last 50 years represent more of a shift in the *type* of fiber than a

significant decrease in the amount.[21]

While dietary recommendations ranging from six to 24 grams of crude fiber per day can be found in popular and scientific literature, almost no detailed information is available to serve as a guide for recommending either the quantity or type of dietary fiber. In the absence of such scientific evidence, *moderation* should be exercised. A variety of whole grain products such as breads and cereals, fruits and vegetables, and nuts will ensure a good mixture of fiber constituents and make a positive contribution to the overall nutritional value of the diet.

If there are beneficial effects from dietary fiber, they must stem from more than one component of dietary fiber. Therefore, adding fiber in the form of bran alone, for example, can be expected to have little effect other than on bowel activity. Likewise, the benefits of adding cellulose alone to bread may be limited to reducing calories. Any generalized statements about the use of dietary fiber as a drug to cure specific diseases should be looked upon with reservation.

REFERENCES

1. Burkitt DP: Some diseases characteristic of modern Western civilization. *Br Med J* 1:274, 1973.
2. Carlson AJ, Hoelzel F: Relation of diets to diverticulosis in the colon of rats. *Gastroenterol* 12:108, 1949.
3. Stanley MM: Quantification of intestinal functions during fasting: Estimations of bile salt turnover, fecal calcium and nitrogen excretions. *Metabolism* 19:865, 1970.
4. DeGroot AP, Lugken R, Pikaar NA: Cholesterol-lowering effects of rolled oats. *Lancet* 2:303, 1963.
5. Keys A, Grande F, Anderson JT: Fiber and pectin in the diet and serum cholesterol concentration in man. *Proc Soc Exp Biol Med* 106:555, 1961.
6. Leveille GA, Sauberlich H: Mechanism of the cholesterol-depressing effect of pectin in the cholesterol-fed rat. *J Nutr* 88:209, 1966.
7. Eastwood M: Vegetable dietary fiber. *Nutrition and the MD:* 3:1, 1977.
8. Leveille, GA: Dietary fiber, *Food and Nutr News* 47:1, 1976.
9. Aries V, Crowther JS, Drasar BS, Hill J, Williams REO: Bacteria and the etiology of cancer of the large bowel. *Gut* 10:334, 1969.
10. Carroll KK: Experimental evidence of dietary factors and hormone-dependent cancers. *Cancer Res* 35:3374, 1975.
11. Chan PC, Cohen LA: Dietary fat and growth promotion of rat mammary tumors. *Cancer Res* 35:3384, 1975.
12. Mendeloff AI: Dietary Fiber. *Nutr Rev* 33:321, 1975.
13. Miranda PM, Horwitz DL: High-fiber diets in treatment of diabetes mellitus. *Ann Intern Med* 88:482, 1978.
14. Ershoff BH: Anti-toxic effects of plant fiber. *Am J Clin Nutr* 27:1395, 1974.
15. Weininger J, Briggs GM: Nutrition update. *J Nutr Educ* 8:172, 1976.
16. Southgate D: The analysis of dietary fiber. In: *Fiber in Human Nutrition.* GA Spiller and RJ Amen, eds. New York, Plenum Pub. Co., 1976.
17. Mrdeza G: Trends in specialty breads. *Cereal Foods World* 29:635, 1978.
18. Eastwood M: Volvulus of the colon. In: *Fiber in Human Nutrition.* GA Spiller and RJ Amen, eds., New York, Plenum Pub. Co., 1976.
19. McNutt, K: Perspective—Fiber. *J Nutr Educ* 8:150, 1976.
20. Heller SN, Hackler LR: Changes in the crude fiber content of the American diet. *Am J Clin Nutr* 31:1510, 1978.
21. Spiller GA, Shipley EA: New perspectives on dietary fiber. *Food Prod Dev* 10:57, 1976.

PEDIATRIC BRIEFS

Selected Abstracts with Comments *

Kaplan EL, et al: Significance of quantitative salivary cultures for group A and non-group A beta hemolytic streptococci (BHS) in patients with pharyngitis and in their family contacts. *Pediatr* 64:904, 1979.

The throat culture in order to be a reliable means of identifying BHS pharyngitis must be able to distinguish between the carrier (no antibody rise) from the patient with bona fide infection (antibody rise). Salivary cultures do not aid in this distinction. Although there is some overlap, the degree of positivity of the throat culture is well correlated with infection. Duplicate throat cultures may be discordant 10 percent of the time, but discordance is uncommonly seen in patients with infection. It is more common in carriers. CRP positively correlates well with infection.

Comment: There has been some recent literature suggesting the fallibility of throat cultures. This test is not perfect. However a symptomatic patient with a strongly positive culture (and a positive CRP, if done) is likely infected and should be appropriately treated. If the culture is negative, the patient is likely uninfected. The use of throat cultures enables the careful physician to reduce unnecessary antibiotic prescribing. Without it, many more children will be treated unnecessarily. I believe all patients with pharyngitis or sore throat should have a throat culture. Those whose throat cultures are strongly positive should receive appropriate therapy. Those whose cultures are weakly positive should be recultured and a CRP done. If the reculture is negative or the CRP is negative I would not treat. If either is positive I would treat. The patient with a negative throat culture who remains symptomatic should be recultured. If still negative, other etiologies than BHS should be sought. If positive I would then treat.

Patient's symptoms	Throat culture		
	+++	+	–
asymptomatic	CRP	reculture & CRP	observe
definite but mild	AB	reculture & CRP	observe
moderate or severe	AB	AB	repeat culture

+++ strong positive
\+ weak positive
– negative

Reculture & CRP – if either is positive, treat with AB
AB – antibiotics (penicillin X 10 d)

Maruyama S, et al: Sensitivity of group A strep to antibiotics. *Am J Dis Child* 133:1143, 1979.

Sixty percent of group A strep in one part of Japan during 1974-75 were resistant to erythromycin, lincomycin, chloramphenicol and tetracycline. All were sensitive to penicillin.

Comment: We must remain on guard. Penicillin is the drug of choice for strep. Resistance to other antibiotics has been known for years and this outbreak of high frequency of resistance to erythromycin is worrisome. Recent reports of pneumococci resistant to penicillin increase the concern. Careful selection of patients to receive antibiotics will delay the bacterial selection of resistance.

Vaillant GE: Natural history of male psychologic health. *N Engl J Med* 301:1249, 1979.

Good mental health may prolong good physical health. ". . .Being chronically anxious, depressed, or emotionally distressed can. . . produce profound effects on host susceptibility to disease." In a study of 204 men over 40 years, 59 with the best mental health did well (two dead or chronically ill by age 53). Of the 48 with the worst mental health 18 became chronically ill or died. Other variables, including alcohol use, tobacco use, obesity and longevity of ancestors, were assessed and these did not affect the significance of the differences. ". . .Good mental health retards midlife deterioration in physical health. . .stress does not kill us so much as *ingenious adaptation to stress* (call it good mental health or mature coping mechanisms) *facilitates our survival.*"

Paris M, et al: An analysis of nonconfirmation rates. Experiences of a surgical second-opinion program. *JAMA* 242:2424, 1979.

In a patient care population of almost a million people, only 351 sought second opinions. Twenty-five percent were not confirmed for surgery. In most of these the consultant simply needed more information. The data available from this study and others neither support nor negate the value of second opinions. More data are needed. Such programs should not be used to estimate the prevalence of unnecessary surgery in a community.

Comment: Despite this crude study, I believe second opinions are valuable. At the least they force the surgeon to justify his plan to a peer. And they allow patients time to

*Abstracted from "Children's Hospital Newsletter," United Hospitals of Newark, Vol. 1, No. 11 (November 1979). Selections are made and original comments prepared by Richard H. Rapkin, M.D., Medical Director, and members of the medical and surgical staff.

consider the plan suggested, as well as an opportunity to understand that physicians are human.

Luft HS, et al: Should operations be regionalized? *N Engl J Med* 301:1364, 1979.

The hypothesis that quality of care improves with the experience of the provider was studied. There was a clear relation between volume and surgical mortality for several procedures including open heart surgery and bypass surgery. Less direct a correlation (but still definite) were procedures such as colectomy, total hip replacement and biliary tract surgery. No influence of volume on mortality was seen for vagotomy or cholecystectomy. Many explanations are possible (none tested in this study) but the data ". . .support the value of regionalization for certain operations."

Comment: No surprise that regionalization works. It has been well proved for perinatal and neonatal intensive care. We must recognize that not all of us can (or should) attempt to do everything well. The authors conclude that ". . .regionalization may be achieved with moderate-sized hospitals doing a full range of safer, volume-insensitive procedures and high volume of a selected number of riskier, volume-sensitive procedures *in which they specialize.*" In an attached editorial (in the same issue) Longmire and Mellinkoff, (p. 1393) suggest that the JCAH could establish standards for high-risk procedures and hospitals could seek approval. Approval could serve as the basis for payment. This might aid and augment what HSAs are doing already.

Chamberlain G: Background to perinatal health; Chalmers L: The search for indices; Beard RW, et al: Fetal asphyxia in labor. *Lancet* 2:1061, 1063, 1117, 1979.

The three major determinants of perinatal mortality are congenital abnormalities, low birthweight and hypoxia. Maternal factors include age, parity and socioeconomic class. "The relation between risk of perinatal death and social and environmental variables is so strong that the greatest scope for promoting perinatal health almost certainly lies outside the traditional sphere of influence of medical workers." On the other hand ". . .birthweight specific mortality rates among heavier babies may be the most sensitive indicators of the quality of (medical) care. . .crude mortality rates (used) for this purpose are thoroughly unsound."

Comment: The Lancet has begun a series entitled "Better Perinatal Health." The above are three tidbits. If you care for mothers or children you should read this series.

Ballard J, et al: A simplified score for assessment of fetal maturation of newly born infants. *J Pediatr* 95:769, 1979.

A reliable, rapid, accurate method of clinically assessing gestational age is needed. This article describes a procedure which takes under four minutes (Dubowitz, six to eight minutes) and is as accurate.

Comment: During the 60's we learned the importance of assessment of gestational age and the significance of "preterm appropriate for gestational age" and "small for gestational age" or "small for dates." This assessment is a mandatory part of routine newborn examination and should be recorded on the initial evaluation sheet in the neonate's chart. Ballard *et al* have simplified this vital evaluation.

Varicella-Zoster Immune Globulin (VZIG). *Morb and Mort Wkly Rep* Dec 14, 1979, p. 589.

VZIG for the prophylaxis of varicella is available at no cost from the Sidney Farber Cancer Institute in Boston (617-732-3121). The supply is very limited and it is available only to patients who meet certain criteria. These criteria are revised and are (see original for details):

a. One of the following:
 1. leukemia or lymphoma
 2. congenital or acquired immunopathy
 3. receiving immunosuppressive drugs
 4. newborn of mother with varicella
b. *and* one of the following:
 1. household contact
 2. playmate (1 hour of indoor play)
 3. hospital contact (in same room)
 4. mother of newborn contracted varicella less than 5 days before or within 48 hours after delivery
c. *and* negative or unknown varicella history
d. *and* age less than 15 (perhaps 15-21)
e. *and* request for VZIG initiated within 72 hours of exposure.

Swartz SL, et al: Persistent urethral leukocytosis and asymptomatic chlamydial urethritis. *J Inf Dis* 140:614, 1979.

Patients with non-gonococcal urethritis usually have four or more polymorphonuclear leukocytes per high-powered field when a stained smear of their urethral exudate (by swab) is done. In addition, asymptomatic sexually active men with such findings on urethral swab stain have chlamydia trachomatis isolated in a significant proportion. A urethral gram-stained smear showing four or more polymorphonuclear leukocytes per high-powered field, in the absence of gonorrhea, is good evidence for c. trachomatis urethritis whether or not the patient is symptomatic.

Lauer JL, et al: Transmission of hepatitis B virus in clinical laboratory areas. *J Inf Dis* 140:513, 1979.

Twenty-four percent environmental surfaces in a dialysis room used specifically for patients positive for Hepatitis B were positive. Transmission to the hospital clinical laboratory occurred and a substantial percent of surfaces associated with blood samples were positive. ". . .A primary mode of HBV transmission to laboratory personnel is via hand contact with HBV—contaminated items. . . .Transmission initially occurs when a person handles. . .containers (which were contaminated)." There is the ". . .need for scrupulous prevention techniques for hepatitis."

Comment: Blood and blood products from hepatitis B positive persons can cause substantial risk. But, except for this risk, the patient with hepatitis B in the hospital is not a great spreader of virus and can be handled without much special precautions. Fecal-oral spread is rare in hepatitis B and although other secretions (tears, saliva, semen) can transmit, close continuous personal contact is usually necessary. (See Favevo MS, et al: *Ann Intern Med* 91:872, 1979).

Like AA, et al: Spontaneous diabetes mellitus: Reversal and prevention in the rat with antiserum to rat lymphocytes. *Science* 206:1421, 1979.

A spontaneous diabetes syndrome occurs in a special breed of rats, characterized by profound inflammatory islet cell disease (insulitis) and subsequent atrophy of B cells, which closely resembles human juvenile onset diabetes. The insulitis has lymphocytes and macrophages infiltrating the inlets suggesting a cell-mediated autoimmune pathogenesis. The administration of antilymphocyte antiserum effectively treats early diabetes in these rats and prevents its occurrence

in non-diabetic litter mates. It is possible that properly timed immunosuppression can prevent rat diabetes.

Comment: Exciting data from the experimental animal that whets our appetite for its human application.

Bartlett JG, et al: Cephalosporin-associated pseudomembranous colitis due to clostridium difficile. *JAMA* 242:2683, 1979.

Pseudomembranous colitis (antibiotic associated colitis, AAC) is caused by the overgrowth of a resistant anerobe, C. difficile, and its toxin. Although usually seen with clindamycin, it is now reported with cephalosporins.

Comment: This disease can occur with many of the commonly used antibiotics. Treatment includes discontinuance of the offending agent and oral vancomycin. Antibiotics have dangers and this is one that can be life-threatening.

Hall WJ, et al: Alterations in pulmonary function following respiratory viral infection. *Chest* 76:458, 1979.

Respiratory syncytial virus bronchiolitis leads to bronchiolar epithelial destruction and intraluminal plugging with sparing of aleveoli. Marked hypoxemia persisting for weeks is seen in infants hospitalized with this syndrome. It is possible that epithelial damage may result in sensitization of adapting airway epithelial receptors. Data are now available which indicate that viral infection may lead to protracted alterations in pulmonary function. Bronchiolitis may be a ". . .major risk factor for the subsequent development of obstructive airway disease in adults."

Comment: RSV is a major problem. Aside from its significant infant morbidity it may play a substantial role in chronic lung disease. The question of whether RSV can cause asthma is no longer just hypothetical.

Newman SL, et al: Prolactin and encephalopathy of Reye's syndrome. *Lancet* 2:1097, 1979.

Severe disturbances in aminoacid metabolism found in Reye's syndrome may be the result of mitochondrial injury and may contribute to the encephalopathy. Serum prolactin is controlled by hypothalmic dopamine and can be a marker for depletion of the latter. Patients with severe Reye's syndrome have higher prolactin levels and this is probably due to dopamine depletion since increased concentration of dopamine are found in the ventricular fluid. The depletion of dopamine may occur because of raised concentrations of tyramine and octopamine, the latter being a false neurotransmitter leading to displacement of dopamine. The use of bromcriptine and levodopa in correction of this problem may be helpful.

Comment: This is very complicated stuff but it is the biochemists who will unravel Reye's syndrome. Possible treatment modalities are suggested.

We're not asking you for money.

Just a few words. To people who need us but don't know we exist.

We're Recording for the Blind. We're already helping more than 13,000 handicapped students. But there are a lot more out there who need our help.

You know who they are. In your work you come across students who are blind, dyslexic or physically unable to handle books. These are the students we help. Since they cannot read their textbooks, we do it for them. On tape. And we send the tapes to the students free of charge.

All we want you to do is tell eligible students about us. Have them contact: Student Services, RFB, Inc., 215 East 58th Street, N.Y., N.Y. 10022, (212) 751-0860. We'll take it from there.

It's such a little thing to ask.

Recording for the Blind is a non-profit organization. All contributions are tax-deductible.

Recording for the Blind, Inc.

an educational lifeline.

Has the Tide Turned Against Socialized Medicine?

THE HONORABLE JAMES COURTER, Washington, D.C.*

The health policy decisions of the 96th Congress may mark a major turning point where solutions involving competition and free economic decisions are chosen instead of increased federal regulation.

Despite the fact that government's heavy regulatory hand is stifling productivity, incentive and growth in the economy as a whole, there are those in Washington who believe that increased government involvement in medicine will solve all our problems. The good news, however, is that those with an interest in bigger government are having a rough time in Congress.

Advocates of regulation claim that the economics of health care are unique and intractably complex, and that only a large government role in the industry will guarantee reasonable cost and adequate care to the health care consumer. While there are some economic problems unique to medicine, we shouldn't be led to believe that only government will solve them. Ultimately, as in all other economic policy questions, we must decide whether the allocation of resources, the types of goods and services to be offered, and the pricing of these goods and services are best determined by Washington or by the men and women who are involved directly in and affected by these choices.

Ours is a society that historically has recognized the value and efficacy of the free market and decentralized decision making. I believe that we have been well served by the market economy, and this belief has been reinforced by my examination of the effects of federal regulation in recent years. I do not believe that imperfections in our health care system call for broad new regulatory programs, many of which will lead us one step closer to socialized medicine.

HOSPITAL COST CONTAINMENT— FIRST STEP TO NHI

The recently defeated hospital cost containment legislation well may have been just such a step toward National Health Insurance (NHI), because it would have "solved" in advance a problem which is a natural result of NHI.

The problem, which we now can observe in Britain, is a severely distorted marketplace characterized by excess demand and reduced supply. Demand for medical services increases naturally as the cost factor is removed from consumer purchasing decisions. Providers of care, including physicians, hospitals and laboratories, are discouraged by their loss of economic freedom as fees and operating procedures are determined by their new supervisor, the federal government.

This imbalance would have to be solved by some form of mandated limit on health spending. A hospital cost containment program already in place would be able to provide such a limit, and critics of NHI would be placated by this cost-control mechanism. This, at least, is how HEW would prefer to see things.

In reality, hospital cost containment would be the counterpart of the British National Health Service's budget ceiling, which forces the rationing of medical care. Waiting lists are created for non-emergency surgery, and certain categories of patients are bureaucratically excluded from eligibility for expensive types of care.

Some may call this a cynical view. However, careful examination of the Administration's painfully contrived case for hospital cost containment leads me to conclude that it was intended as the foundation for a major push toward NHI.

Briefly stated, the cost-containment legislation would have limited the annual increase in each hospital's expenses to a percentage equal to (a) average annual wage increases, (b) average increases in the prices of goods and services purchased by hospitals, (c) an allowance for national population increase, (d) one percent for increased "intensity," i.e., improved quality of hospital services. This limit is described as "voluntary"—if it is not met, however, mandatory limits would be imposed. Leaving aside the implications of this Orwellian usage of "voluntary," one is led to ask what problems prompted this draconian solution.

Whether deliberately or not, HEW misperceived the problem. Because hospital costs were rising in real terms, we were told, controls were needed, despite the recent success of the industry's voluntary effort. This ignores several important developments such as the increased life expectancy of the general population and the higher cost of care for the elderly, the trend to increased outpatient treatment of patients who formerly would have been hospitalized, and, most importantly, the use of new technologies to increase the quality of care.

New technological developments have improved some of the medical industry's "products," and other "products" have been invented to perform diagnostic and therapeutic tasks which were previously impossible. This demonstrable change in the composition of the medical "market basket" in

*United States Congressman from the 13th District. He is a member of the Congressional Committee on Armed Services, Subcommittees on Research and Development and Military Compensation, and the Committee on Post Office and Civil Service, Subcommittees on Civil Service and Census and Population.

recent decades has rendered HEW's simplistic cost comparisons invalid.

One example is coronary intensive care, a capacity that existed in 1965 in about one in 2,000 hospitals, and which we find today in almost one-third of our hospitals. During the same time span, the in-hospital heart attack death rate fell by almost 30 percent.

But don't confuse HEW with these facts—the logic of hospital cost containment won't allow for the explanation that we have willingly paid for and derived benefits from new technologies which have revolutionized many areas of medical care. Forget the possibility that the increased expense may have been worthwhile.

These technological changes, referred to as increased "intensity" of hospital service, were especially endangered by HEW's formula, which would have limited intensity growth to approximately one-fifth of its recent historical rate of increase.

In addition to this threat to the quality of care, the cost containment program included a broad range of "discretionary" powers which would have been granted to the Secretary of HEW, and which totally belied the "voluntary" nature of the program. A small selection includes the powers to (a) define which costs would be exempted from the limit, with all the coercive power this implies, (b) make adjustments in the percentage limit based on a hospital's past performance, (c) approve or disapprove state cost containment programs, and (d) assess civil penalties for revenues exceeding the "voluntary" limit.

Members of the House soon realized, then, that this was not the simple, self-policing program that the Administration lobbyists were trying to sell. When it was realized that the price of the predicted cost savings would be a reduction in health care services and a limit on technological improvement, the President's program went down to defeat by a 234 to 166 vote.

THE SHUR WAY TO HIGHER HOSPITAL COSTS

Earlier in 1979, the Congress had the good sense to reject another Administration proposal which would have added a costly burden to the hospital industry without improving the quality of patient care. This proposal was called the System for Hospital Uniform Reporting (SHUR).

SHUR was proposed in response to a provision in Public Law 95-142, the Medicare-Medicaid Anti-Fraud and Abuse Amendments of 1977. This provision required that hospitals provide HEW with certain information describing hospital costs, utilization of facilities, and information relating to federal reimbursements.

From a two-page section in the law, HEW created a 606-page manual which effectively would have forced hospitals to abandon their standard accounting systems or to maintain two separate sets of accounts. In a classic example of bureaucratic disregard of legislative intent, HEW ignored explicit Congressional instructions *not* to create a uniform system of accounting, and to make the reporting system cost-effective.

The Health Care Financing Administration admitted that the cost of SHUR would be at least $65 million, while the American Hospital Association estimated SHUR's first-year costs to exceed $180 million. It is difficult to believe that the same Administration was crusading against inflation in the health care industry.

To understand the regulator's mentality fully, we should examine the alternatives HEW ignored.

The approach of investigating known cases of fraud, and searching for administrative or organizational deficiencies which may have caused them, was rejected. Instead, an imperious demand for a gargantuan pile of data was issued.

Also rejected was the approach which would have set forth reporting requirements while leaving the means of gathering information to be determined by the hospitals themselves. Simplicity often falls victim to the bureaucratic self-preservation instinct, as complex tasks are invented to keep the agencies in business and growing.

SHUR was never permitted to see the light of day, however. Representative Douglas Bereuter, a first-term Republican from Nebraska, offered an amendment to HEW's appropriations bill which prohibited funding for SHUR, and his amendment passed by a 306 to 101 margin. HEW plans to propose a new version of SHUR sometime this spring.

A plausible case could be made that by rejecting a federally-imposed accounting system for hospitals, we narrowly averted another element of the groundwork for socialized medicine.

A POSITIVE APPROACH

A great deal of time and energy was expended in the course of defeating these ill-conceived Administration proposals. This should not lead us to conclude, however, that nothing constructive was achieved.

In response to the clamor for increased regulation of health care, many members of Congress are searching for ways to use the marketplace to improve the delivery of health care in America. This answers the one legitimate point that was raised by the pro-regulation lobby, namely, that conservatives criticized proposals without offering alternatives of their own. It should be said, of course, that we often were rejecting "solutions" to problems which were misperceived or non-existent.

However, we have begun to present positive alternatives. By doing so, we permanently can defuse the movement toward socialized medicine while offering the benefits of the free market.

Our task need not be difficult. Competition and private initiative have enabled this nation of immigrants to build the world's leading industrial economy. In addition, it can be shown that our economic strength is being eroded by a government that is too big and too involved in decisions which should be made in the private sector.

Several ways of enhancing competition are being proposed, and a thorough discussion of health care economics will take place in Congressional hearings this year.

One proposal which has attracted considerable interest involves revisions of parts of our tax code which may encourage both labor and management to opt for the most costly health coverage. For the worker, health benefits are not subject to our high income tax rates, so there is substantial incentive to increase this component of his or her income. Employers, on the other hand, may deduct health benefit payments from their taxes. Each side of the bargaining table is, therefore, shielded from some of the cost factors of health care. Proposals are, therefore, being offered to restore incentive to the bargaining process by changing these tax laws.

Another possible modification of the law would require that employers make equal contributions to each employee's health plan. Faced with a lump-sum health benefit, each employee freely would decide whether to use all or part of that sum for health insurance. Because the employee would keep the amount not spent on health insurance, costs and

benefits would be carefully scrutinized.

There are many other proposals being aired, and I invite the comments of the membership of the Medical Society of New Jersey on proposals which may be worthy of Congressional consideration.

It is clear to me that opponents of regulation must take the initiative in health policy discussions. I reject the idea that, in order to fulfill our commitment to provide care for the poor and disadvantaged, we must nationalize the health care industry.

Most importantly, the arguments against regulation and socialized medicine must be stated in a positive and comprehensive manner. While theoretical discussions of economics and finance are enough to discredit NHI in the minds of economists, financiers and logicians, the general public may remain unconvinced or worse still, inattentive. Arguments for freedom are arguments for the public welfare, and they must be presented as such.

The debate over NHI presents Americans with two choices, and it is imperative that they understand the implications of those choices. A free market will allow people to weigh the costs and benefits of the health coverage they ultimately choose. Socialized medicine will inhibit investment in health care, limit its qualitative improvements, and force the rationing of care. Despite the protestations of the President and Senator Kennedy, it must be pointed out that there is a severe price associated with the pie-in-the-sky of socialized medicine.

Misguided fiscal and tax policies have deprived Americans of jobs. Misguided energy policy has reduced our energy supply, and our economic health suffers as a result.

We can't afford to take the same gamble with the health of our people.

Report of the Nominating Committee

Offices To Be Filled by Election—1980 Annual Meeting

Charles S. Krueger, M.D., Chairman

Office	Term	Nominee and County
President-Elect	1 year	Armando F. Goracci, M.D., Gloucester
1st Vice-President	1 year	Howard D. Slobodien, M.D., Middlesex
2nd Vice-President	1 year	Alexander D. Kovacs, M.D., Union
Secretary	3 years	Arthur Bernstein, M.D., Essex
Treasurer	3 years	Rudolph C. Gering, M.D., Mercer
Trustees:		
1st District	3 years	Frank Y. Watson, M.D., Essex
2nd District	3 years	Ralph J. Fioretti, M.D., Bergen
5th District	3 years	Sherman Garrison, M.D., Cumberland
Judicial Councilor:		
2nd District	3 years	Robert A. Weinstein, M.D., Sussex
5th District	3 years	Ronald M. Fisher, M.D., Cumberland
AMA Delegates:		
	1 year	Myles C. Morrison, Jr., M.D., Morris
	2 years	Alfred A. Alessi, M.D., Bergen
	2 years	Frederick W. Durham, M.D., Camden
	2 years	Karl T. Franzoni, M.D., Mercer
	2 years	John S. Madara, M.D., Salem
	2 years	Henry J. Mineur, M.D., Union
AMA Alternate Delegates:		
	2 years	Palma E. Formica, M.D., Middlesex
	2 years	Charles S. Krueger, M.D., Burlington
	2 years	Carl A. Restivo, Sr., M.D., Hudson
Delegates and Alternate Delegates to Other States		
New York:		
Delegate	1 year	Albert F. Moriconi, M.D., Mercer
Alternate	1 year	F. Sterling Brown, M.D., Atlantic
Connecticut:		
Delegate	1 year	Edward M. Coe, M.D., Union
Alternate	1 year	Gastone A. Milano, M.D., Atlantic
Administrative Councils:		
Legislation:		
1st District	3 years	Anthony P. Caggiano, Jr., M.D., Essex
4th District	3 years	Irving P. Ratner, M.D., Burlington
Medical Services:		
1st District	3 years	Richard H. Sharrett, M.D., Union
4th District	3 years	Charles O. Tyler, M.D., Camden
Mental Health:		
1st District	3 years	Alvin Friedland, M.D., Essex
2nd District	3 years	William H. Bristow, Jr., M.D., Bergen
Public Health:		
1st District	3 years	Edward M. Coe, M.D., Union
4th District	3 years	Watson E. Neiman, M.D., Burlington
Public Relations:		
1st District	3 years	Robert J. Lorello, M.D., Essex
4th District	3 years	Jesse Schulman, M.D., Ocean
Standing Committees:		
Annual Meeting	3 years	James H. Spillane, M.D., Warren
Auxiliary Advisory	3 years	George T. Hare, M.D., Camden
Finance and Budget	3 years	Charles S. Krueger, M.D., Burlington
Medical Defense and Insurance	3 years	Frank J. Malta, M.D., Ocean
Medical Education	3 years	Roberta G. Rubin, M.D., Passaic
Publication	3 years	Julio del Castillo, M.D., Mercer

DOCTORS' NOTEBOOK

Trustees' Minutes February 17, 1980

A regular meeting of the Board of Trustees was held on Sunday, February 17, 1980, at the Executive Offices, Lawrenceville. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Jersey Medical Political Action Committee (JEMPAC) . . . Approved the following resolution, introduced by Frank Y. Watson, M.D., Chairman of JEMPAC, concerning the establishment of the Medical Society of New Jersey Political Action Committee:

RESOLVED, that the Board of Trustees of MSNJ authorize the establishment of a Political Action Committee connected with the Medical Society of New Jersey; and be it further

RESOLVED, that the Board of Trustees appoint the Board of Directors of the PAC and direct the Board of Directors to implement the mission, goals, and objectives of the PAC; and be it further

RESOLVED, that the Board of Trustees authorize the Executive Director of MSNJ to assign MSNJ staff to the PAC to provide the administrative assistance necessary to implement the mission, goals, and objectives of the PAC.

The Board was advised of the mission, goals and objectives of the proposed Political Action Committee (PAC), which are as follows:

Mission:
Develop the New Jersey medical profession into an effective political force at the State and Federal levels.

Goals:

1. Promote and strive for the improvement of government by encouraging and stimulating physicians, their spouses and others to take an active and effective part in governmental affairs.
2. Encourage physicians and others to understand the nature and actions of government as to important political issues, and as to the records of office holders and candidates for public office.
3. Assist physicians and others in organizing themselves for more effective political action and in carrying out their civic responsibilities.
4. To do any and all things desirable and necessary for the attainment of these **goals** and to promote a lively public interest in good government consistent with the best American tradition.

Objectives:

1. Doctors and spouses actively involved in political party of their choice.
2. Enrollment of 50 percent of MSNJ members and spouses as active members of the PAC by 1982. (10 percent in 1980; 30 percent in 1981; 50 percent in 1982).
3. Establishment of effective PAC District Committees in each Congressional District in New Jersey (1980).
4. Establishment of candidate support committees in Federal districts with key congressional races in 1980.
5. Establishment of candidate support committees in each N.J. legislative district (1981).
6. Establishment of statewide candidate support committees in election years for gubernatorial and senatorial candidates
7. Supply effective keymen for MSNJ state and congressional Keyman Programs.
8. Conduct bipartisan political education seminars statewide and in districts as needed to assist physicians in becoming politically involved in the state legislative and congressional races.
9. Establish a close working relationship between the PAC and the executives of the component medical societies and the specialty societies in N.J.
10. Identify and develop close working relationship between the PAC and physicians and physician groups that are politically active.
11. Establish PAC speakers' group and schedule speakers for component medical society meetings, auxiliary meetings (state and county), specialty society meetings and hospital medical staff meetings.
12. Promote meetings between political candidates (or legislators) and physician groups (component societies, specialty societies, hospital medical staffs, etc.)

AMA Dues for Medical Students . . . Noted that the Executive Committee had considered the suggestion of paying AMA dues for students attending New Jersey medical schools and had taken no action and also that the initial reaction of the Committee on Revision of Constitution and Bylaws and the Committee on Long Range Planning and Development was not in support of this concept.

Medicaid Reimbursement for Hospital Outpatient Services . . . Noted that the New Jersey Hospital Association will enter into litigation concerning a regulation of the Department of Human Services which limits Medicaid reimbursement for hospital outpatient service to 60 percent of cost.

Nurse Midwife Regulations . . . Agreed to support the State Board of Medical Examiners' proposed ruling concerning the registering and regulating of the practice of certified nurse midwife.

Note: Local representatives of the American College of Obstetricians and Gynecologists agree that the proposal is satisfactory and that it provides for the utmost safety for mothers and babies in the State of New Jersey.

Livingston vs. Medical-Surgical Plan . . . Approved retaining Mr. Burton L. Eichler to represent MSNJ, defendant in a suit involving an alleged denial of payments for services in obstetrical cases via a theory of "association representation" in an antitrust case—charging that by virtue of its objection to ancillary personnel, physicians' assistants, and others, MSNJ has attempted to control the financial portion of health care benefits.

Financial Statements . . . Received as informative copies of the balance sheet, revenue and expenses statements and budget analysis of MSNJ for the seven months ending December 31, 1979.

AMA Congress of Medical Education . . . Approved a recommendation authorizing Arthur Bernstein, M.D., Chairman of the Committee on Medical Education, Dr. Bernstein's successor (Dr. Bernstein's term on the Committee on Medical Education expires in May 1980), and Mr. Martin E. Johnson, Director of Public Affairs and Medical Education of MSNJ to attend (with expenses paid) the AMA Congress on Medical Education to be held in Chicago, April 24-26, 1980.

Physician Licensure in 1979 . . . Noted that the State Board of Medical Examiners issued 1,383 new licenses to practice medicine and surgery in New Jersey in 1979. This does not, however, reflect the number of new physicians who actually are practicing in the State.

Prepaid Legal Services for Members of MSNJ . . . Approved offering prepaid legal services, on a voluntary basis, to members of MSNJ involved with activities under the Administrative Procedures and Licensing Act of the State Board of Medical Examiners, as outlined below by Mr. Maressa:

The hearing mechanism used when physicians are called before the State Board of Medical Examiners is a matter of concern, and a viable way to assist physicians at the time of the initial procedure has been considered. Many physicians are not aware of the implications attached to the informal hearing conducted by the Attorney General and the Administrative Law Judges and of the importance of an adequately prepared defense at this initial phase of the regulatory process, before the case reaches the appellate level. For a prepaid fee of $15 the services of an attorney, adept in the procedures of the State Board, would be provided to members of MSNJ. The services would include consulting and meeting with the involved physician and appearing with and for the physician at the informal hearing. The $15 fee would not include any subsequent hearings that might occur after the initial process. At the onset a minimum of 500 participating physicians is projected to effect the plan.

CMDNJ Report . . . Received as informational a written report from the College of Medicine and Dentistry of New Jersey, which highlighted the following:

1. The implementation of the compromise plan concerning development of medical education in south and central New Jersey, agreed to last April by CMDNJ and the Board of Higher Education, will be costly. Options for renovations at the Piscataway campus—increasingly pared-down plans to create enough space for the basic-science education of 92 students per class of CMDNJ-Rutgers and 56 per class at CMDNJ-NJ School of Osteopathic Medicine—will be presented to the College's Board of Trustees. Also to be presented is a draft concept of construction of clinical educational facilities for both allopathic and osteopathic programs in South Jersey.

2. A response is being prepared to MSNJ's and the New Jersey Hospital Association's wish to have CMDNJ cooperate in reacting to the State Department of Health's emergency medical services proposals.

3. Programs within the CMDNJ School of Allied Health Professions include education in cytotechnology (15 students), dental assisting (18), dental hygiene (40), medical technology (12), nurse midwifery (13), surgical technology (7), physicians' assistant (48), physical therapy (38), radiological technology (19), respiratory therapy (15), medical technician/paramedic training (10), dietetic internship (6).

Family Practice Programs at CMDNJ . . . Noted that in response to MSNJ's resolution calling for the establishment of a family practice department at CMDNJ it has been determined that no need for such a department exists at this time. The President of the New Jersey Academy of Family Physicians noted that the faculty at CMDNJ has established an ad hoc committee to study the situation and that his Society is satisfied with the progress being made. It was noted also that CMDNJ-Rutgers has a department of family practice and a family practice residency program.

MSNJSA . . . Received a report from the Medical Society of New Jersey Student Association which noted that (1) membership has remained constant, (2) most students were in favor of MSNJ paying AMA dues for students attending New Jersey medical schools—those who were not in favor of such a plan expressed concern that students uninterested in organized medicine would serve as dead weight and would drop out of the AMA after graduation, wasting the money invested in their dues, and (3) of the students polled concerning the use of the generic "M.D." the opinion was that M.D. is an academic degree as is D.O. and that only the specific degrees earned should be used.

Note: Response to a question from the Morris County Medical Society revealed that the American Medical Student Association (an organization of medical students formerly known as SAMA and a subset of the AMA) has no connection with the AMA or with the Medical Society of New Jersey at this time.

Council on Mental Health . . . Referred back to the Council on Mental Health its recommendation that the Medical Society of New Jersey support Resolution #24 (1979 House of Delegates) regarding the treatment of the compulsive gambler. Noting that the Council had difficulty in establishing relationships with the Department of Health and Gamblers Anonymous, the Board could not understand how it could endorse the Council's recommendation since one of the "resolveds" called for MSNJ to join other concerned groups to develop legislation which would establish appropriate rehabilitative services in the State of New Jersey. The media has reported that legislation along these lines is being drafted for introduction by Assemblyman Fortunato and the Board suggested that the Council pursue this avenue.

Rennie vs. Klein Decision (Psychotropic Drug Administration). . .Delayed action on a recommendation from the Council on Mental Health calling attention to the possible far-reaching effects of the Rennie vs. Klein Decision and urging MSNJ to keep abreast of the appeals now before the Third U.S. Circuit Court of Appeals and to support the American and New Jersey Psychiatric Associations (who have filed an amicus curiae) in this matter, until Legal Counsel can contact the attorneys involved to determine whether affidavits are appended to the decision.

Note: The Rennie vs. Klein Decision requires consent to be taken for the administration of all psychotropic drugs (to committed patients) with every possible side reaction explained to the patient whether or not he can understand. It is feared there might be an easy transition of the Decision to other fields of medicine.

Peer Review Mechanism . . . Referred the following recommendation from the Committee on Medical Defense and Insurance to the Board of Governors of the Medical Inter-Insurance Exchange of New Jersey:

That the Board of Governors of the Medical Inter-Insurance Exchange of New Jersey consider a surcharge type of penalty at the next policy renewal for physicians who do not cooperate with the peer review mechanism of the Exchange.

Occidental Life Insurance Company . . . Approved the following recommendation from the Committee on Medical Defense and Insurance:

That the Occidental Life Insurance Company's Jumbo Coverage Annual Renewable Term Program, providing $50,000 to

$1,000,000 life insurance coverage, be offered to MSNJ's membership.

Federal Age Discrimination ... Approved the following recommendation from the Committee on Medical Defense and Insurance:

That the Medical Society of New Jersey support the amendment of the Blue Cross/Blue Shield Program to bring it into compliance with the Federal Age Discrimination in Employment Act and its Amendment effective January 1, 1979, offering added benefits to both employers with 20 or more employees and those with fewer than 20 employees.

Major Medical Insurance Program ... Approved the following recommendation from the Committee on Medical Defense and Insurance:

That the Medical Society of New Jersey support the amendment of the Major Medical Insurance Program to bring it into compliance with the Federal Age Discrimination in Employment Act and its Amendment effective January 1, 1979, only for those employers with 20 or more employees.

Medical Education ... Approved the following recommendation from the Committee on Medical Education:

That the Board of Trustees approve a Workshop for directors of medical education and hospital physicians involved in continuing medical education to be co-sponsored by the Committee and the Academy of Medicine at a maximum cost of $500.

The Committee anticipates that its future efforts will be in the direction of medical education and has spoken to representatives of the medical schools concerning the future of medical education in New Jersey. The Committee is considering the AMA Council on Medical Education report, "Future Directions for Medical Education," which surveys the interrelated events and influences that have brought about the present state of medical education, addresses complex issues, including the problem of the interface between undergraduate and graduate medical education, and identifies general principles that may be useful in providing guidance and direction for medical education in the future. The President of CMDNJ is preparing a white paper on this report and copies of each will be forwarded to the Board.

Medicaid ... Approved the following recommendation of the Committee on Medicaid:

That the Medical Society of New Jersey ask the Medicaid Division to allow some members of the Medical Society to act as *participants* in discussing budgetary functions in connection with preparing their budget as it relates to the private practice of medicine.

Note: It was pointed out that the State Constitution precludes the Division from spending more than its approved budget and that fully 70 percent of the budget for Medicaid is in an area over which the Division has little or no control.

Emergency Mass Casualty Plan ... Approved the following recommendation from the Committee on Emergency Medical Care:

That the State of New Jersey Plan for Emergency Mass Casualty Care be amended by adding the following to Section V, Paragraph C. Operations:

"4. National Burn Victim Foundation Services—

"If there are excessive numbers of burn victims, we immediately should notify the National Burn Victim Foundation advising them of the disaster, the site, number of burn victims (if possible), the degree of burns (if possible), and request that they activate their Burn Disaster System."

Cardiopulmonary Resuscitation Program for Industry ... Referred back to the Committee on Emergency Medical Care the following recommendation because the Board felt it did not have the authority to mandate to industry how its supervisory and management personnel should be trained.

That the CPR Program be undertaken by every industry with 25 or more employees, and that all personnel in industry be trained in a three-hour cardiac defender course, and that it be mandated that supervisory and management personnel be trained in an eight hour CPR course with recertification and annual refresher training.

Marihuana and Phencyclidine (PCP) ... Approved a recommendation from the Committee on Emergency Medical Care that all hospital emergency room departments be notified of the problem concerning the lacing of marihuana with phencyclidine and include a copy of the report from the National Institute on Drug Abuse entitled, "Phencyclidine: A Review." It was directed that the Hospital Association be notified of this action.

Drug and Alcohol Abuse ... Approved the following recommendation from the ad hoc Committee on Drug and Alcohol Abuse:

That MSNJ participate in a joint effort with the New Jersey Department of Health in the distribution of the booklet on drug and alcohol abuse entitled "This Side Up" to the members of MSNJ; the New Jersey Department of Health to provide the booklets, MSNJ to pay for the mailing costs.

Long Range Planning and Development ... Voted in favor of the concept of limiting the number of elected delegates to the House of Delegates to 300, using a ratio of one (1) delegate per thirty-one (31) members, with the proviso that each component society will be entitled to at least three (3) delegates, and directed that this action be transmitted to the 1980 House of Delegates.

Note: Should the House endorse the concept, that action will be referred to the Committee on Revision of Constitution and Bylaws for development of the appropriate amendment to the Bylaws; that amendment then will be transmitted to the 1981 House of Delegates for adoption.

Specialty Society Representation in House of Delegates .. Approved the following recommendation concerning the seating of specialty society representatives in the House of Delegates:

That the Board of Trustees grant approval for a request to effect a charter change to make it possible for representatives of nationally certified specialties to serve in the capacity of delegates in MSNJ's House of Delegates with representation not to exceed one delegate for each specialty.

Note: If the 1980 House of Delegates authorizes the Society to seek a charter change and assuming the Legislature grants its approval, the House of Delegates ultimately will have to adopt a Bylaw change reflecting what the amended charter then would allow.

Note: At the national level the seating of specialty society representatives in the AMA House of Delegates has not had a salutary effect. It was pointed out that for a long time specialty societies have been invited to send representatives to the meetings of the Board of Trustees where they have the opportunity for full expression of opinion and debate and thus have a greater ability to influence MSNJ in behalf of their specialty society than they would at one or two meetings in a year of the House of Delegates. Specialty society representatives also are invited to attend meetings of the Council on Legislation, the Committee on Medical Defense and Insurance and the Spring and Fall Conferences of Presidents.

Malpractice Coverage for Surgeons on Wards . . . Voted to respond to Michael R. Ramundo, M.D., assuring him that the New Jersey State Medical Underwriters, Inc., has indicated that a class III surgeon may perform surgery on ward patients and be covered by his insurance policy.

Proposed Regulation to Prohibit Unfair Claims Settlement Practices . . . Referred to the Committee on Medical Defense and Insurance for investigation and report a communication from Robert L. Bildner, Esq., Director of Consumer Services, N.J. Department of Insurance, indicating that the Department currently is in the process of promulgating a regulation which would prohibit unfair claims settlement practices, and MSNJ has been requested to express its opinion as to whether any medical facts should be withheld from a claimant on the grounds that such a disclosure may not be in the claimant's best interest.

Blood Banking . . Received as informational the following statements concerning blood banking in New Jersey:

- A 1974 panel appointed by the Governor to study blood banking in New Jersey and the MSNJ Ad Hoc Committee on Blood Banking, which met with several interested groups, came to naught since no one could reach an agreement.
- In 1976 the New York Blood Center moved into New Brunswick and established a depot in the northern part of the state. Penn Jersey Red Cross moved to Atlantic City and took over the southern part of the state.
- Representatives of New York Blood Center approached Dr. Stanley Bergen and asked if he would do something about the sad state of blood banking in New Jersey. A meeting of all blood banking facilities in New Jersey was called and it was learned that the Medical Director of the New Jersey Blood Services, a unit of the New York Blood Bank, is proposing to break away from the parent unit.
- The Medical Director of New Jersey Blood Service is proposing to develop an organization in New Jersey that will, if necessary, go to the Legislature to mandate that only New Jersey organizations can do blood banking in the State.
- Dr. Bergen has offered to approach legislators and business interests and to establish a committee to determine if this can be accomplished. He is going to approach business leaders in the State, including the President or Chairman of the Board of Johnson & Johnson to ask him to lead the movement.
- Dr. Todd stated that the New York program puts more blood into New Jersey than is taken out and that it is filling a void that the North Jersey-Essex Blood Bank was unable to do.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

In a few weeks, the 214th Annual Meeting of the Medical Society of New Jersey will be held at the Meadowlands Hilton, in Secaucus. On Monday morning, May 12, 1980, the Foundation and the Family Practice Section will present a program on "The Changing Role and Responsibility of the Family Practitioner." Principal speakers will be John S. Madara, M.D., Past President of MSNJ, and Frank Snope, M.D., Chairman of Family Practice at CMDNJ-Rutgers. James S. Todd, M.D., Chairman, Board of Trustees, MSNJ, will chair the program. A reactor panel will include Charles Dooley, M.D., Medical Director of the PSRO of Union County, Mr. Mel Thompson, Director of Group Plans for the Prudential Insurance Company, Mr. Terrance Keenan, Vice President of the Robert Wood Johnson Foundation, Carl Restivo, M.D., Director of Family Practice, Christ Hospital, Jersey City, and Howard Zeidman, M.D., who is President-Elect of NJFHCE. Paul J. Rizzuto, M.D. Chairman of the Family Practice Section of MSNJ, will provide the summation. The names and titles of the participants indicate experts who are involved in many levels of medical care and its organization and concerned representatives of the public.

The topic is a timely one, since it indicates the renewed interest in primary care, of which the family practitioner is the key individual. The Foundation, because of its interest in accessibility, efficiency and quality of medical care, is gratified to share this meeting with the representatives of family practice. We also are concerned because of the influence of governmental, social, and other forces on the function of primary care and who should provide it. Factors in the changing role of the family practitioner include:

- Interest in primary care in the various manpower and planning studies. President Carter's budget attempts to counter the current "shortage" of primary care health professionals, by adding $18 million, to a total of $83 million, for grants for residencies in primary care and family medicine. This would add 765 new and converted first-year family medicine residencies to those which now exist.
- Emphasis on primary care as a means of reducing more costly specialties ("secondary" and "tertiary"). In this designation as used by the planners, "primary care" includes internists, pediatricians, and obstetrics/gynecology, as well as the family doctor.
- Use of *non-physicians* as dispensers of primary services (health care). This includes not only nurse-practitioners and physicians' assistants, but also such disciplines as optometry ("primary" eye care) and podiatry ("primary" foot care).
- Most prepaid health care plans emphasize primary care. Properly used, this means that each subscriber and his family has access to a physician who will meet his medical needs. The family practitioner is best suited to this role. One of the prime aspects of the IPA arrangement is that it will enable continuing care by the same family doctor. Most plans require that specialty referrals be made through the primary care doctor. Some HMOs have been using *other than* physicians for this purpose, which is not the route to quality care. A few plans are trying an arrangement whereby the primary doctors "buy" the specialty referrals for their patients. The idea is that the primary doctor will use those consultants who provide quality care in an efficient manner.

Our speakers will address these and other issues influencing the family practitioner in today's world. An estimate circulating around the country says that, by 1990, there will be a "significant surplus" of physicians in the United States. The surplus, it is said, will be in most specialties, with a shortage in primary care. Assuming that such predictions are accurate (and there is no guarantee of that), how will the planners and manpower experts try to adjust the balance? Will regionalization, certificate of need, educational grants, and other devices be used to influence types of practice? This is another of those topics which demands the attention of organized medicine and the public, so that there is no dilution of the quality of care in the process.

A recent MSNJ advertisement in my local paper reminds us that MSNJ is the oldest medical society in the country. It

says that peer review, continuing medical education, and health care evaluation are all functions of the society. NJFHCE is happy to be associated with MSNJ in these endeavors. The May 12, 1980 program is an example.

CMDNJ Notes*

Stanley S. Bergen, Jr., M.D.
President

The young, the very young and the elderly will benefit from a series of new College programs in various stages of development.

- For infants and young children with heart ailments, a regional pediatric cardiac center has been established at the United Hospitals Medical Center of Newark through a joint program of CMDNJ-New Jersey Medical School and United Hospitals of Newark.
- For the Johnnies and Janes of New Jersey who suffer dyslexia, a Reading Disabilities Research Institute is being established at CMDNJ-Rutgers Medical School through a $2.5 million grant funded by the National Institute of Child Health and Development.
- For the elderly in Central New Jersey, an innovative health care service system is being established through an $87,400 planning grant, also to CMDNJ-Rutgers Medical School, from the John A. Hartford Foundation, New York.

The recently dedicated pediatric cardiology unit at United became one of 100-in-the-world, similarly equipped catheterization laboratories and diagnostic centers. The $1.3 million facility includes a pediatric surgical unit, photographic monitoring and viewing rooms, and a variety of diagnostic testing capabilities.

The center represents one phase of a plan between the College and United Hospitals to create (under a pediatric teaching affiliation between CMDNJ and the hospital) a regional center for sophisticated pediatric cardiac diagnosis, surgery and treatment at the hospital.

Serving as director of the center is Joseph Amato, M.D., professor of surgery at CMDNJ-New Jersey Medical School and Director of pediatric cardiovascular surgery at United. M.A. Ali Khan, M.D., associate professor of pediatrics at the medical school and director of pediatric cardiology at United, is responsible for the laboratory. Both physicians formerly were associated with Tufts New England Medical Center in Boston, and were recruited by Vincent Lanzoni, M.D., Ph.D., dean of CMDNJ-New Jersey Medical School, and James R. Cowan, M.D., United Hospitals' president.

The laboratory's diagnostic x-ray examination stand for cardiac angiography is designed on a parallelogram principle, which allows any projection within certain limits without moving the patient. The system is powered by a computerized, almost fully automated x-ray generator, which measures the patient's radiation absorption characteristics before examination, and then automatically selects the correct technique and exposure for each patient, regardless of size, age or weight.

Surgical facilities include modern intraoperative monitoring, built-in pediatric warmers, hyperthermia equipment and Cobe pediatric cardiopulmonary bypass pump.

The Reading Disabilities Research Institute is funded for a five-year period. During that time, investigators from CMDNJ-Rutgers Medical School, Rutgers University, Montclair State College and Columbia University's College of Physicians and Surgeons will be working to further their understanding of the reading and language problems of youngsters and the various approaches to remedying them. A seminar program and library also will be developed.

Dyslexia is found in about five percent of boys and in a smaller percentage of girls. Although it once was considered primarily a symptom of emotional problems, dyslexia now is considered a learning problem.

Marion Blank, Ph.D., professor of psychiatry at CMDNJ-Rutgers Medical School, serves as director of the Institute. She says that because reading involves so many component skills, dyslexia may arise from difficulty in any or all of the components.

The planning grant to establish a health care system for the elderly will cover the initial stages in the planning and development of an integrated network of health services throughout Central Jersey. Essentially the network would include prevention, health maintenance, long-term care and social service components and a central unit to serve as an information and referral service.

The plan also will include a medical education component to increase the involvement of medical students and postgraduate physicians in geriatric medicine. They would be involved in training and providing services at the cooperating facilities.

The project is being directed by Richard C. Reynolds, M.D., dean of CMDNJ-Rutgers Medical School, and Anne R. Somers, professor of community medicine and family medicine at the school. An advisory board is being formed, along with the appointments of a medical director, associate director and administrator for the project.

Professor Somers, who has a wide reputation in the fields of health economics and consumer health education, says the system will provide the College with "an unique opportunity to develop a program that could emerge as a national model." She stresses that the prospective plan, which calls for the use of existing facilities in the area, will emphasize cost effectiveness.

The educational aspect of the project would serve to expand current instruction in geriatrics at CMDNJ-Rutgers Medical School. Instruction now includes an elective course for second-year students, a required rotation for third-year students at a nursing home and a faculty seminar. A postgraduate medical education program stressing geriatric medicine is expected to begin next year.

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Mohammed Mushtaque, M.D., 183-11 Hillside Ave., Apt. 11-K, Jamaica, NY 11432. Dow (Pakistan) 1975. Board eligible. Group, solo, or institutional. Available July 1980.

Narciso J. Samuy, M.D., 1180 East and West Road, West, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Group or partnership. Available July 1980.

CARDIOLOGY—Shou-Li Hong, M.D., 7400 Haverford Avenue, Apt. E-113, Philadelphia, PA 19151. Taipei (Taiwan) 1970. Also, general internal medicine. Board certified (IM). Partnership, group, solo. Available July 1980.

H.G. Yekanath, M.R.C.P. (UK), 10 Overlook Road, Apt. 4-G, Summit 07901. Mysore (India) 1965. Also general internal medicine. Single or multi-specialty group, institutional. Available July 1980.

DERMATOLOGY—Ellen Blank, M.D., 1675 York Avenue, New York, NY 10028. Mt. Sinai 1975. Board certified. Any type practice. Available June 1980.

Karen Kade, M.D., 38 Fidelity Court, Carrboro, NC 27510. Albert Einstein 1976. Board eligible. Multi-specialty group. Available August 1980.

GASTROENTEROLOGY—Michael F. Fina, M.D., 134 North Street, Apt. 7, Newtonville, MA 02160. New York Medical College 1975. Also, general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

GENERAL PRACTICE—Gregory A. Pistone, M.D., 2018 High Street, Haddon Heights 08035. Pennsylvania State 1979. Board eligible. Student health/adolescent medicine, pharmaceutical, ER, house physician. Available July 1980.

HEMATOLOGY/ONCOLOGY—P. S. Bala, M.D., 882-6 Clifton Court Circle, NE, Atlanta, GA 30329. Calicut (India) 1965. Board eligible. Any type practice. Available July 1980.

INTERNAL MEDICINE—Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, cardiovascular diseases. Board certified. Group or partnership. Available July 1980.

Omprakash B. Ramani, M.D., 61-15 98th Street, Apt. 17-F, Rego Park, New York 11374. B. J. Medical (India) 1973. Board certified. Group or partnership. Available July 1980.

Stuart R. Schlanger, M.D., 105 North 31st Avenue, Omaha, NE 68131. Washington University 1977. Special interest, emergency medicine. Board eligible. Group or partnership. Available July 1980.

Richard Plotzker, M.D., 79 Holbrook Road, North Quincy, MA 02171. St. Louis University. Board eligible. Group, clinic, institutional, or industrial. Available July 1980.

Khadar Baig, M.D., 2681 Arlington Drive, Apt. 303, Alexandria, VA 22306. Andhra (India) 1971. Subspeciality, gastroenterology. Board certified. Any type practice. Available July 1980.

Douglas R. Shumaker, M.D., 7861 Jefferson Street, Hummelstown, PA 17036. George Washington University 1977. Partnership, single or multi-specialty group, solo, emergency room. Available July 1980.

Joel M. Cohen, M.D., 1131 University Boulevard West, Apt. 1404, Silver Spring, MD 20902. SUNY-Downstate 1975. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Sybil Kramer, M.D., 68 Winchester Street, Brookline, MA 02146. SUNY-Downstate 1975. Subspecialty, endocrinology. Board certified. Single or multi-specialty group, partnership. Availablle July 1980.

Mark L. Friedman, M.D., 2901 S. King, Apt. 1003, Chicago, IL 60616. University of Chicago 1977. Subspecialty, emergency medicine. Single or multi-specialty group, partnership. Available July 1980.

Richard L. Rudolph, M.D., 124 Pearl Street, Red Bank 07701. CMDNJ 1976. Board eligible. Single or multi-specialty group, partnership. Available.

Robert H. Gordon, M.D. 5500 Wissahickon Ave., Apt. 405-C, Philadelphia, PA 19144. Jefferson 1975. Subspecialty, rheumatology. Board certified. Any type practice. Available July 1980.

Lawrence P. Saladino, M.D., 3428-B Alpine Court, Lexington, KY 40502. Georgetown 1975. Subspecialty, emergency medicine. Institutional, multi-specialty group, emergency room. Available July 1980.

Laurence J. Clark, M.D., 5038 Cliffhaven Drive, Annandale, VA 22003. Georgetown 1975. Subspecialty, emergency medicine. Partnership, solo, emergency room. Available July 1980.

Devi P. Misra, M.D., 7K University Terrace, Columbia, MO 65201. SCB Medical College (India) 1967. Subspecialty, pulmonary medicine. Board certified. Solo, institutional, group. Available July 1980.

Jon Allen Kotler, M.D., c/o Dept. of Medicine, 1356 Lusitana Street, Honolulu, HI 96813. Emory 1976. Subspecialty, emergency medicine. Board eligible. Single or multi-specialty group, partnership. Available.

Howard L. Kramer, M.D., 4 Longfellow Place, Apt. 803, Boston, MA 02114. Florida 1975. Board certified. Single or multi-specialty group, partnership. Available.

Mirza M. Ashraf, M.D., West St. Road, Carthage, NY 13619. King Edward (Pakistan) 1967. Subspecialty, cardiovascular diseases. Solo, single-specialty group, institutional. Available.

Mohamed M. Haq, M.D., 10555 Fondren, Apt. 422, Houston, TX 77096. Osmania (India) 1973. Subspecialty, neoplastic diseases. Board certified. Single or multi-specialty group, research. Available July 1980.

Betty J. Barcevac, M.D., 2795 Shore Parkway, Apt. 1-G, Brooklyn, NY 11223. Guadalajara (Mexico) 1976. Group, partnership, single or multi-specialty group. Available July 1980.

Robert Lebow, M.D., 77 Grove Street, Montclair 07042. SUNY-Downstate 1977. Board eligible. Academic, partnership, multi-specialty group, industrial. Available July 1980.

NEPHROLOGY—Vincent A. Graziano, M.D., 445 East 68th Street, Apt. 4-B, New York, NY 10021. Georgetown 1975. Also general internal medicine. Board certified (IM). Solo, group, or partnership. Available July 1980.

NUCLEAR MEDICINE—Philip A. Bardfeld, M.D., 160 West End Avenue, Apt. 8-E, New York, NY 10023. SUNY-Downstate 1961. Board certified. Single or multi-specialty group, institution. Available.

OBSTETRICS/GYNECOLOGY—Jeffrey M. Good, M.D., Mt. Sinai Medical Center, Milwaukee, WI 53201. University of Barcelona (Spain) 1975. Board eligible. Single or multi-specialty group. Available August 1980.

Lemuel G. Villanueva, M.D., 173 Lionhead Court, Baltimore, MD 21237. University of East (Philippines) 1974. Board eligible. Solo, group, HMO associate, hospital-based. Available July 1980.

Mina M. Chudgar, M.D., 15427 Jester Avenue, Baton Rouge, LA 70816. B.J. Medical College (India) 1972. Board eligible. Group, partnership. Available July 1980.

Mohammad Imtiaz Ahmad, M.D., 677 Central Avenue, Barboursville, WV 25504. Pakistan 1970. Board eligible. Solo with coverage when needed, small town. Available.

OPHTHALMOLOGY—Ronald A. Serniuk, M.D., 502 Thompson Avenue, Roselle, NJ 07203. Georgetown 1971. Board eligible. Partnership or solo. Available.

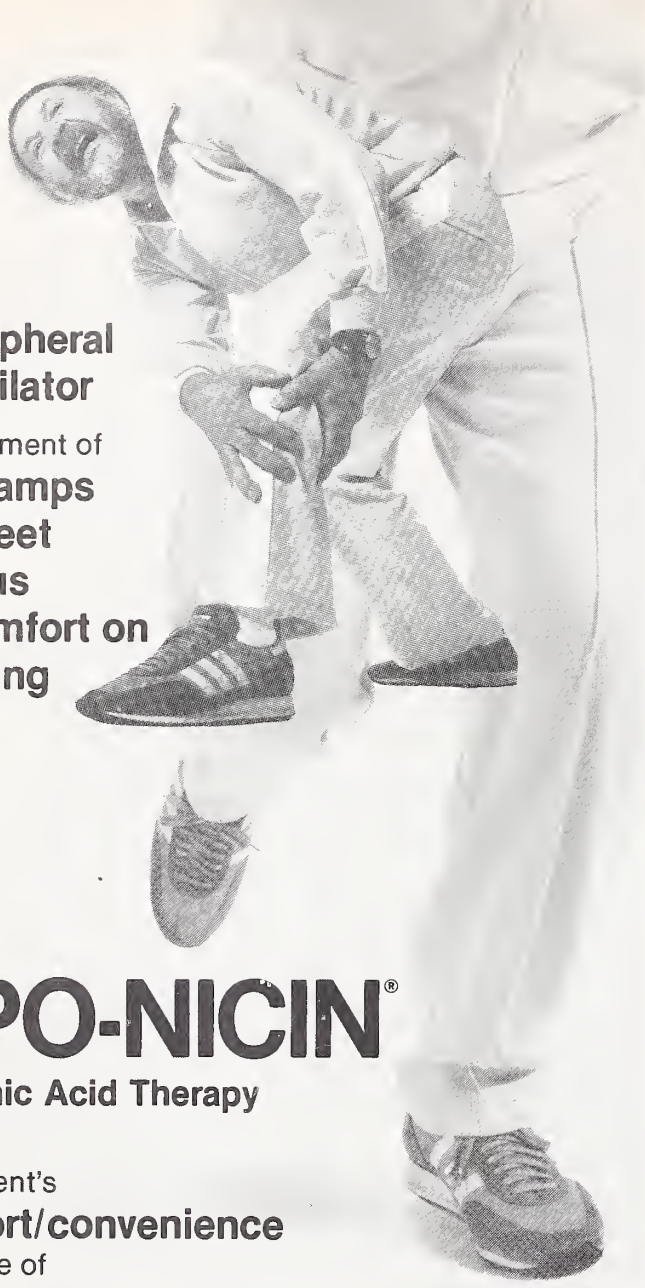
Mitchell Schuman, M.D., 1675 York Avenue, New York, NY 10018. New York Medical 1975. Board eligible. Any type practice. Available July 1980.

PATHOLOGY—Uma Raghavan, M.D., Dept. of Pathology, Norwalk Hospital, Norwalk, CT 06850. Delhi (India) 1973. Both AP/CP. Board certified. Group. Available.

PEDIATRICS—Norma P. Samuy, M.D., 1180 East and West Road, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Solo, partnership, clinic. Available July 1980.

Soni Mahesh, M.D., 100 Hospital Plaza, #811, Paterson 07503. Baroda (India) 1973. Board eligible. Partnership or solo. Available July 1980.

PSYCHIATRY—Charles Goldfarb, M.D., 121 Deerhaven Road, Mahway 07430. Buf-



A peripheral vasodilator

for treatment of

leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's

comfort/convenience

in choice of

3 strengths

Gradual Release

LIPO-NICIN®/300 mg.

Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release

LIPO-NICIN®/250 mg.

Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

falo 1956. Board certified. Partnership in single or multi-specialty group. Available July 1980.

PULMONARY DISEASES—Susan Kallos Sekely, M.D., 7528 Arlington Expressway (220), Jacksonville, FL 32211. Budapest U. of Med. Sciences 1952. Board certified. Hospital, group, or state institution. Available June 1980.

RADIOLOGY—S. David Bogart, M.D., 79-39 210th Street, Bayside, NY 11364. Special interest, diagnostic radiology. Board certified. Group, hospital-based group. Available.

Donald S. Cohen, M.D., 1089 Briar Way, Fort Lee 07024. Guadalajara (Mexico) 1975. Board eligible. Group, partnership, solo (will consider purchase). Available May 1980.

SURGERY, GENERAL—B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.

Mohan Lal Sarwal, M.D., 42-52 Union Street, Apt. 117, Flushing, NY 11355. Govt. Medical, Patiala-Punjab (India) 1968. Group, partnership, solo. Available.

Mohammad A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roc Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Behune Ave., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Nardo T. San Diego, M.D., 171 Davis Avenue, Piscataway, NJ 08854. Far Eastern (Philippines) 1961. Board eligible. Solo or partnership. Available July 1980.

Seeplaputhur G. Sankar, M.D., 128 Normandy Drive, Norwood, MA 02062. Prince of Wales (India) 1974. Special interest, vascular surgery. Board eligible. Group, partnership, solo. Available July 1980.

SURGERY, NEUROLOGICAL—Syed J. Shahid, M.D., 157 Corbin Place, Brooklyn, NY 11235. Dow Medical (Pakistan) 1972. Single or multi-specialty group, solo. Available.

SURGERY, ORTHOPEDIC—William Stratford, M.D., 16 Bennett Village Terrace, Buffalo, NY 14214. SUNY-Buffalo 1975. Solo, partnership, single-specialty group. Available July 1980.

Lewis Preschel, M.D., 104-40 Queens Boulevard, Forest Hills, NY 11375. SUNY-Downstate 1975. Board eligible. Partnership. Available July 1980.

SURGERY, PLASTIC—Donald F. Clukies, M.D., 681 Richardson Road, Rochester, NY 14623. Upstate (Syracuse, NY) 1973. Special interest, head and neck surgery. Board eligible (general surgery). Partnership, single or multi-specialty group. Available July 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

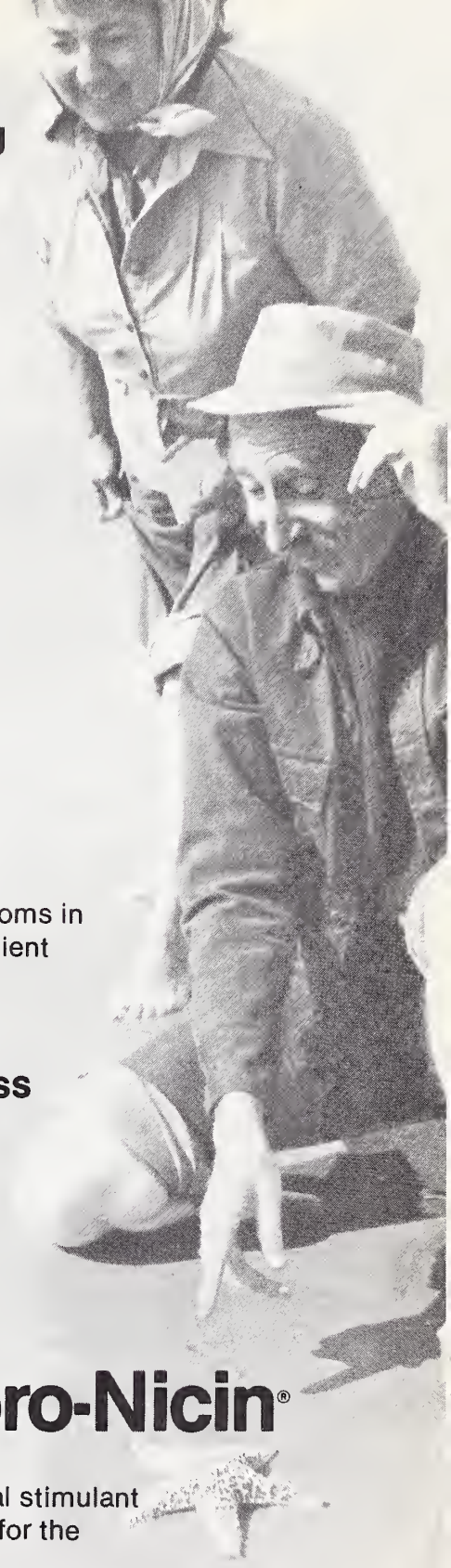
Sidney Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available June 1980.

UROLOGY—G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

Eliahu Koren, M.D., 5700 Arlington Avenue, Apt. 6-J, Riverdale, NY 10471. Jerusalem 1968. Board eligible. Group, partnership, solo. Available July 1980.

Krishan G. Gupta, M.D., 21 Losson Garden Drive, Buffalo, NY 14227. Kanpur (India) 1964. Board eligible. Solo, partnership, group. Available July 1980.



Alert and functioning in the sunset years

Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:

Pentylenetetrazole	100 mg.
Nicotinic Acid	100 mg.
Ascorbic Acid	100 mg.
Thiamine HCL	25 mg.
l-Glutamic Acid	50 mg.
Niacinamide	5 mg.
Riboflavin	2 mg.
Pyridoxine HCL	3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

LETTERS TO THE JOURNAL

Computerized Tomography of the Head—An Ambulatory, Out-Patient Service

January 22, 1980

Dear Dr. Krosnick:

Computerized x-ray tomography of the head, anticipated by William W. Oldendorf, a clinical neurologist, and perfected by Godfrey Hounsfield of the Central Research Laboratories of FMI, Ltd., has transformed much of neurological diagnosis from inferential deduction to concrete perceptualization. Immediately upon clinical availability, the medical profession grasped the relevance of being able to look into the head without opening it.

Because the apparatus is costly, an assumption was made on the part of government and other third-party payers that doctors would buy the machines, overuse them, and add to the cost of medical care. The HSA limited the number of scanners to be assigned to each area. However, when a radiologist in private practice applied for a certificate of need and was turned down by the New Jersey Commissioner of Health, the Appellate Division of the Superior Court of New Jersey declared that the commissioner's decision was not justified under the law, "Marsh vs. Finley, 160 N.J. Super. 193."

The CT scanner for the head is fundamentally an out-patient diagnostic instrument. Properly used, it may eliminate many unnecessary hospital admissions and limit intracranial problems for hospital admission to those who need to be admitted. Most of the patient material requiring the test is ambulatory. The vast majority of the tests can be timed to suit the patient's needs. Most CT scanners are and will be set up in hospitals. However, the free standing CT scanner deserves recognition for the economy it offers in the elimination of hospital costs wherever competent physicians are willing to venture their own money to pay for the instrument.

(Signed) Ira S. Ross, M.D.

Technology and Health Care Costs

January 29, 1980

Dear Editor:

I interpret the January editorial, "Medical Technological Advances and Health Care Costs" (*J Med Soc NJ* 77:13, 1980) as arguing that health planners and regulators are stifling the development and deployment of health technology on the basis of cost. Having reviewed much of the referenced data, I have some different conclusions.

While I agree that one cannot expect physicians specially trained to use expensive technologies for the benefit of patients who need them, not to do so, I believe that their trainers ought to be more obliged to a society helpless to restrain the support of the livelihood of all these graduates regardless of public need. There is, of course, difficulty in the way society chooses to define this need: specialists create their own demand (witness the higher incidence of surgery where there are more surgeons per capita, apparently unrelated clearly to health status in the population).

I interpret the position of the editorial to be that the task of generating sufficient information on which to make informed public policy decisions is too large. I do not share this view for the following reasons. Health planners, physicians and health services' administrators make decisions with incomplete information every day. Only a very small amount of dollars spent on health and medical care are allocated to evaluation of services, while the overwhelming bulk are allocated for direct services, some of which are of at least questionable efficacy. Health and medical care have fallen into the public domain; the topic is too important to be decided only by health planners, physicians, health services administrators, and others working in this field.

The editorial's final paragraph calls for preplanning the method of payment of scientific applications. I fully support this. In theory, it is appealing, but its message has not reached those developing the dynamic spatial reconstructor (DSR) at the Mayo Clinic. The DSR, a moving picture version of the celebrated computed tomographic (CT) scanner in diagnostic imaging, is expected to render CT obsolete and to market for around three million dollars. Its development was announced in *National Institutions of Health News and Features,* February, 1978. It is uncomfortable to feel like a sitting duck in expecting—soon—each of six medical schools in Philadelphia to propose the purchase and operation of its own DSR. Some schools, to perpetuate tradition, probably will ask the public to buy them more than one. If the editorial is taken seriously, the planning for the appropriate use of this technology should have begun years ago, and should not wait until a mad rush after the applications for a Certificate of Need are forced upon the Health Systems Agencies across the country for a decision within a few weeks afterward.

There are obvious challenges with the implementation of responsible public information of public policy as opposed to conventional formulation of self-regulating policy largely by workers in health and medicine. To some, it is tantamount to society's conscious rationing of goods and services—playing God. What we have done and would continue to do otherwise is to ration care quietly on an individual basis, by income, race, geography, or other unacceptable criteria.

I remain optimistic that the effort to increase both the number of informed citizens and the body of information on which society can form public policy in health and medicine is worthwhile.

Steven C. Becker*

*Mr. Becker is a health planner for the Health Systems Agency of Southeastern Pennsylvania, Philadelphia. His views do not necessarily represent the position of the HSA.

CME CALENDAR

ANESTHESIOLOGY

May

3 **Anesthesia for the Neonate**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

14 **Anesthesia for Patient with Ischemic Heart Disease and Recent MI**
7:30 p.m.—Helene Fuld Medical Center, Trenton
(Helene Fuld Medical Center)

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

May

6 **Pulmonary Diseases**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

6, 13, 20, 27 **Medical Lecture Series**
9-10 a.m.—Holy Name Hospital, Teaneck
(Holy Name Hospital and AMNJ)

7 **Common Neonatal Problems**
11:30-1 p.m.—Rahway Hospital
(AMNJ)

7 **Endocrinology Dinner Meeting**
6-9:30 p.m.—Holiday Inn, East Orange
(Endocrinology Section of AMNJ)

7, 14, 21, 28 **Endocrinology Grand Rounds**
11:30 a.m.-1 p.m.—Rotates between College Hospital, Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

7, 14 **Therapy in Hypertension Disorders of Salt and Water Balance**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

7, 14, 21, 28 **Endocrinology Conferences**
3:30-5 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

7, 14, 21, 28 **Medical Lecture Series**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

7, 14, 21, 28 **Advances in Medicine**
9:30-11 a.m.—Bergen Pines County Hospital, Paramus
(Bergen Pines County Hosp. and AMNJ)

7 **Adolescent Medicine**
8:30 a.m.-4:30 p.m.—Ramada Inn, Rochelle Park
(Barnert Memorial Hospital and AMNJ)

7 **Pituitary Tumors**

21 **Chronic Obstructive Pulmonary Disease**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

13 **Pathogenesis and Treatment of Acne**
8-10 p.m.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

19 **Unresolved Pneumonia**
12:30-1 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

20 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ-NJ and AMNJ)

20 **Pericarditis**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

21 **Infections in the Compromised Host**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Joint Education Committee of Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

22 **Visiting Professor Medical Grand Rounds**
12:30-1:30 p.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

June

3 **Arthritis**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

3 **Cyanotic Heart Disease**
9 a.m.—Freehold Area Hospital
(AMNJ)

3, 10, 17, 24 **Medical Lecture Series**
9-10 a.m.—Holy Name Hospital, Teaneck
(Holy Name Hospital and AMNJ)

4 **Diabetes**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

4 **Multiple Sclerosis: Update**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

4, 11, 18, 25 **Advances in Medicine**
9:30-11 a.m.—Bergen Pines County Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

6, 13, 20, 27 **Endocrinology Conferences**
3:30-5 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark, and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

11 **Crystal Deposit Joint Disease**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital & AMNJ)

14 **Knee Arthrography**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

17 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ-NJ Medical School and AMNJ)

17 **Hodgkin's Disease**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

17 **Urology**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

20 **Pernicious Anemia**
12 noon—Freehold Area Hospital
(AMNJ)

NEUROLOGY/PSYCHIATRY

May

1 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

1, 8, 22, 29 **Psychiatric Lecture Series**
11 a.m.-12 noon—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

2 **Psychiatric Lecture Series**
1:30-5 p.m.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

5 **Death in the Family**
8-10 p.m.—1046 South Orange Ave. Short Hills
(Essex Psychiatric Seminar and AMNJ)

5, 12, 19 **Neuroscience Conferences**
11:30 a.m.-12:30 p.m.—Bergen Pines County Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

6, 13, 20, 27 **Seminar on Law and Psychiatry**
3:30-5:30 p.m.—Rutgers Law School, Newark
(Rutgers University Law School and AMNJ)

6, 13, 20, 27 **Psychiatric Case Conference**
7:30-9:30 a.m.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

7 **Dx and Rx of Depressed Adolescents**

21 **Geriatric Psychiatry**
1-3 p.m.—Ancora Psychiatric Hospital, Hammonton

FINANCIAL
SEE PAGES
243, 315,
316

FINANCIAL PLANNING—TAX HAVENS

Reduce personal tax liability. Increase net worth. Improve profitability of your private, group, or corporate practice. Reduce, defer, or eliminate Federal/State taxes——legally.

U.S. Tax Planning Corporation conducts seminars for doctors nationally (see advertisement this issue).

For information, call toll-free 1-800-543-3000—operator, 220 anytime.

FAMILY INSTITUTE OF WESTCHESTER
presents:

CANCER AND THE FAMILY:
THE HEALING CONTEXT

Friday and Saturday, April 25-26, 1980
Society for Ethical Culture, New York City
Fee: $100.00

David Berenson, M.D. — Norman Paul, M.D.
Murray Bowen, M.D. — Albert E. Scheflen, M.D.
Bernauer W. Newton, Ph.D. — Harold Wise, M.D.
and Gregory Bateson on videotape

This two-day symposium will present approaches such as multi-generational family process and cancer; hypnotic approaches; operational family mourning; and network therapy.

For descriptive brochure, write to Family Institute of Westchester, 346 Mamaroneck Ave., White Plains, New York 10605, or call (914) 761-6161.

THE DEPARTMENT OF MEDICINE
and
THE PAGE AND WILLIAM BLACK
POST-GRADUATE SCHOOL OF MEDICINE
of the MOUNT SINAI SCHOOL OF MEDICINE (CUNY)

NEW APPROACHES TO OLD PROBLEMS IN INTERNAL MEDICINE

Under the Direction of
RICHARD GORLIN, M.D.
HARRIET S. GILBERT, M.D.
and FACULTY of the MOUNT SINAI SCHOOL OF MEDICINE

MAY 13 through 16, 1980
Tuesday through Thursday, 9:00 AM to 5:00 PM; Friday, 9:00 AM to 4:00 PM (4 Sessions)
FEE: $300. (including Luncheon)

AMA Category I: 24 credit hours
This course will be given at the Mount Sinai Medical Center, New York, New York.

APPLY TO: Director, The Page and William Black Post-Graduate School of Medicine, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. Tel.: (212) 650-6737.

(Ancora Psychiatric Hospital and AMNJ)

7 **Ongoing Child Psychiatry Case**
14 **Conference**
21 8:30-10:30 a.m.—Trenton Psychiatric
28 Hospital
(Trenton Psychiatric Hospital and AMNJ)

10 **Psychotropic Use in the Medically Ill**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

11 **Cerebral Ischemia**
9 a.m.-12 noon—Meadowlands Hilton
(CMDNJ and AMNJ)

14 **Grand Rounds in Psychiatry and**
28 **Mental Health Sciences**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

16 **Management of Seizure Disorders**
12 noon—Freehold Area Hospital
(AMNJ)

19 **Visual Syndrome Identification**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

21 **Early Home Environment and Adult Diagnosis**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

21 **Special Problems in Neurology—A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

21 **Recreation Therapy**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(Carrier Foundation and AMNJ)

21 **Management of Violent Patient**
1:30-3:30 p.m.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

22 **Office Management of Sexual Problems**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

June

2 **An Adolescent's Suicide Attempt**
8-10 p.m.—9 Marquette Road, Montclair
(Essex Psychiatric Seminar and AMNJ)

2 **Neuroscience Conferences**
9 11:30-12:30 p.m.—Bergen Pines County Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

3 **Psychiatric Case Conference**
10 7:30-9:30 a.m.—Trenton Psychiatric
17 Hospital
24 *(Trenton Psychiatric Hospital and AMNJ)*

4 **Behavioral Psychiatric Treatment of Gastrointestinal Disorders**
18 **Biological Aspects of Schizophrenia**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

4 **Ongoing Child Psychiatry Case**
11 **Conference**
18 8:30-10:30 a.m.—Trenton Psychiatric
25 Hospital
(Trenton Psychiatric Hospital and AMNJ)

5 **Psychiatric Lecture Series**
12 11 a.m.-12 noon—Greystone Park
19 Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

6 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

11 **1980 Drug-Induced Psychoses**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

11 **Grand Rounds in Psychiatry and**
25 **Mental Health Sciences**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

12 **Freud and Horney: Psychoanalytic Models via the Analysis of a Controversy**
8:30-10:30 p.m.—St. Barnabas Medical Center, Livingston
(NJ Psychoanalytic Society and AMNJ)

18 **Special Problems in Neurology—A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

OBSTETRICS/GYNECOLOGY

May

1 **Grand Rounds in Obstetrics/**
8 **Gynecology**
15 4-5 p.m.—College Hospital, Newark
22 *(CMDNJ and AMNJ)*
29

2 **Amenorrhea**
23 **Diabetes in Pregnancy**
8-9 a.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

7 **Distinguished Lectures in Obstetrics/ Gynecology**
8-10 p.m.—Coachman Inn, Cranford
(CMDNJ and AMNJ)

7 **Combined Grand Rounds in Obstetrics/**
14 **Gynecology**
21 3-5 p.m.—Rotates between College
28 Hospital, Newark Beth Israel Medical Center, St. Michael's Medical Center, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

21 **Ovarian Tumors**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

June

4 **Combined Grand Rounds in Obstetrics/**
11 **Gynecology**
18 3-5 p.m.—Rotates between College
25 Hospital, Newark Beth Israel Medical Center, St. Michael's Medical Center, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Center
(CMDNJ and AMNJ)

5 **Grand Rounds in Obstetrics/**
12 **Gynecology**
19 4-5 p.m.—College Hospital, Newark
26 *(CMDNJ and AMNJ)*

13 **Gynecologic Endocrinopathies**
8-9 a.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

PATHOLOGY

May

13 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

13 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

17 **Annual Meeting: Immunopathology**
Rutgers Medical School, Piscataway
(NJ Society of Pathologists and AMNJ)

June

10 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

10 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

PEDIATRICS

May

3 **Anesthesia for the Neonate**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

6 **Failure to Thrive (Pediatrics)**
9 a.m.—Freehold Area Hospital
(AMNJ)

7 **Pediatric Infectious Diseases**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

June

16 **Intractable Diarrhea**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

RADIOLOGY

May

8 **Doppler and Ultrasonic Imaging in Peripheral Vascular Disease**
7:30-9:30 p.m.—Overlook Hospital, Summit
(NJ Institute of Ultrasound in Medicine and AMNJ)

14 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

15 **To Be Announced**
7:15-10:15 p.m.—Hospital Center at Orange
(Radiological Society of NJ, Diagnostic Radiology Section for Northern NJ and AMNJ)

20 **Radiology**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

21 **Radiotherapy Section Dinner Meeting**
6:30 p.m.—The Manor, West Orange
(AMNJ)

June

11 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

14 **Knee Arthrography**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

GENERAL SURGERY

May

6 **Surgical Lecture Series**
5-6 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

6 **Tumor Conferences**
13 11 a.m.-12 noon—Morristown
20 Memorial Hospital
27 *(Morristown Memorial Hospital and AMNJ)*

16 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

19 **Distinguished Lecture Series in Surgery**
4:30-5:30 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

27 **Frozen Sections In Surgical Pathology**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

June

3 **Tumor Conferences**
10 11 a.m.-12 noon—Morristown
17 Memorial Hospital
24 *(Morristown Memorial Hospital and AMNJ)*

17 **Colon/Rectal Cancer**
8:30 p.m.—Fair Lawn Memorial Hospital
(AMNJ)

20 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

24 **Cardiovascular Surgery**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

SURGICAL SPECIALTIES (includes ENT, Neurosurgery, Ophthalmology, Orthopedic, Plastic, and Vascular Surgery.)

May

7 **Cardiovascular Surgery**
1:30 p.m.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

21 **Surgery for Decubiti**
4-5 p.m.—Kessler Institute for Rehabilitation, West Orange
(Kessler Institute and AMNJ)

27 **Thoracic Surgery**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

June

18 **Surgical Procedures in Neurogenic Bladder**
4-5 p.m.—Kessler Institute for Rehabilitation, West Orange
(Kessler Institute and AMNJ)

24 **Liver Trauma**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

MISCELLANEOUS

May

1 **Development Biology**
8 4-6 p.m.—Institute for Medical Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

3 **Impact of Quality Assurance on Hospital Reimbursement**
8:30 a.m.-4 p.m.—The Marriott, Saddlebrook, NJ
(American College of Utilization Review Physicians)

5 **Nutrition and Oral Health**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

7 **Organizational Meeting: NJ Soc. for History of Medicine**
11 a.m.—Academy of Medicine of NJ
2 Princess Road, Lawrenceville
(AMNJ)

10- **Annual Meeting, MSNJ**
13 Meadowlands Hilton, Secaucus

28 **Annual Awards Dinner**
6 p.m.—Chanticler, Millburn
(AMNJ)

28 **Ethical Dilemmas in Medicine**
9-11 a.m.—Roosevelt Hospital, Menlo Park
(Middlesex General Hospital and AMNJ)

June

19 **Physiological Aspects of Human Aging**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

OBITUARIES

Dr. Herik R. Caterini

A member of our Essex County component, Herik R. Caterini, M.D., died at his home on December 22, 1979, after a short illness. A native of Italy, born in 1922, Dr. Caterini earned his medical degree from the University of Naples in 1947. He came to Martland Hospital for graduate work in 1959 and obtained his license to practice in New Jersey in 1965, and had been in private practice in obstetrics and gynecology since that time. Dr. Caterini was board certified in his specialty and a Fellow of the American College of Surgeons and of the American College of Obstetrics and Gynecology. His hospital affiliations included Martland (now College Hospital) and St. Michael's Hospitals in Newark, St. Joseph's in Paterson, and the Veterans Administration Medical Center in East Orange. He was professor of obstetrics and gynecology at New Jersey Medical School-CMDNJ, Newark.

Dr. Joseph V. Crecca

Joseph V. Crecca, M.D., a member of our Essex County component, died in Saint Barnabas Medical Center, Livingston, on February 9. He had been attending cardiovascular and thoracic surgeon at St. Mary's Hospital in Orange and was on the staff at Clara Maass Memorial Hospital, Belleville, and St. Michael's and Crippled Children's Hospitals in Newark. A native of Newark, born in 1911, Dr. Crecca was graduated from the University of Maryland College of Medicine in 1941.

Dr. Marcus A. Fath, Jr.

Word has been received of the death on December 28, 1979 of Marcus A. Fath, Jr., M.D., after a long illness. A member of our Cape May County component, Dr. Fath was a native of New Jersey, born in 1913, and was graduated from Georgetown University College of Medicine in 1938. He had practiced general medicine in the Wildwood area for many years, retiring in 1975 for reasons of disability. Dr. Fath had been affiliated with Burdette-Tomlin Memorial Hospital in Cape May Court House. He had served in the medical department of the AUS during World War II.

Dr. Hyman P. Fine

At the grand age of 80, Hyman P. Fine, M.D., one of Perth Amboy's well-known pediatricians, died on February 8 in Perth Amboy General Hospital. A native of Canada, Dr. Fine was graduated from the University of Toronto School of Medicine in 1922 and came to the United States in 1929 to pursue a residency in Pediatrics at Children's Hospital in Philadelphia. He was board certified in his specialty and was a Fellow of the American Academy of Pediatrics. He had been chief of pediatrics at Perth Amboy General Hospital and served a term as president of the staff. Dr. Fine was active in organized medicine and had been president of his county medical society. Last year he was a recipient of MSNJ's Golden Merit Award indicating 50 years of practice.

Dr. Robert D. Graupner

Word has been received of the death of an affiliate member from the Union County Medical Society, Robert D. Graupner, M.D. Dr. Graupner, a native of Jersey City, born in 1928, was graduated from New York State University Medical School in 1953 and pursued a fulltime career in research, after serving in the medical department of the United States Air Force for two years. Most recently he had been living and working in Lincoln, Nebraska.

Dr. George W. Grenhart

Word just has been received that a former medical examiner for Camden County, George W. Grenhart, M.D., died following a cerebral vascular accident on November 18, 1979, at West Jersey Hospital in Camden where he was a member of staff. A native of Philadelphia, Dr. Grenhart earned his medical degree from Hahnemann Medical College in 1933 and pursued a career in orthopedics. He served as medical examiner for the New Jersey Workmen's Compensation Board for 15 years and had had a term on the board of trustees of the West Jersey Hospital. Doctor Grenhart retired from active practice in 1974. During World War II he served in the United States Navy in England, Australia, and Japan. Dr. Grenhart was 78 years old at the time of his death.

Dr. Bede F. Howard

Bede Francis Howard, M.D., a member of our Essex County component, died on January 23 at his home. A native of Newark, born in 1917, Dr. Howard was graduated from Boston College of Physicians and Surgeons in 1945 and pursued a career in psychiatry. He was board certified in that specialty and had been affiliated with the Veterans Administration facilities in Lyons, Coatesville, Pennsylvania, and Chillicothe, Ohio. He returned to New Jersey to enter private practice in 1960 and was affiliated with St. Vincent's Hospital in Montclair, St. Mary's Hospital in Orange and the Clara Maass Memorial Hospital in Belleville.

Dr. Jose J. Iglesias

A senior member of our Essex County component, Jose J. Iglesias, M.D., of Elizabeth, died suddenly at his home on December 15, 1979. Born in Havana, Cuba in 1904, Dr. Iglesias earned his medical degree from the University of Havana School of Medicine in 1928 and pursued graduate work in urology. He was on the faculty at the University Hospital in Havana, ultimately becoming professor of surgery and chairman of the department of urology. He was a political prisoner in Cuba from 1960 to 1969 when he came to the United States. He accepted a position as visiting professor of urology and later associate professor in that department at Martland Hospital (now College Hospital). He was board certified in his specialty and had been affiliated also with

St. Michael's Medical Center in Newark and the Veterans Administration facility in East Orange.

Dr. Milton Kannerstein

A member of our Passaic County component, Milton Kannerstein, M.D., died at his home in Philadelphia on February 18. A native of Philadelphia, born in 1911, Dr. Kannerstein was graduated from Temple University Medical School in 1936 and pursued residencies in pathology at Willard Park and Lincoln Hospitals in New York, becoming board certified in his chosen field. He practiced in Newark and in Paterson (where he was affiliated with the Barnert Memorial Hospital) until 1972, when he accepted appointment as Associate Professor of Pathology at Mount Sinai School of Medicine in New York. There he did research on the effects of inhaled mineral substances. Dr. Kannerstein was a Fellow of the College of American Pathologists and during World War II served in the United States Navy Department of Medicine, mostly in the South Pacific.

Dr. Harry Oestreicher

Word has been received of the sudden death at Pascack Valley Hospital, Westwood, on December 4, 1979, of Harry Oestreicher, M.D., a member of our Bergen County component. Born in Germany in 1913, Dr. Oestreicher earned his medical degree at the University of Bologna in Italy in 1938 and came to the United States for internship and graduate training in psychiatry at Greystone Park State Hospital. He became board certified in that specialty and was a Fellow of the American Psychiatric Association. Dr. Oestreicher accepted appointment as chief neurologist at the VA Hospital in Lyons and also an appointment as associate professor of psychiatry at New York Medical College. In 1960 he went to Independence, Iowa as clinical director of the Mental Health Institute, returning to New Jersey in 1969 as staff psychiatrist at the Bergen Pines County Hospital and director of the alcohol unit there.

Dr. Marguerite A. Schafer

Marguerite A. Schafer, M.D., an emeritus member of our Passaic County component and formerly a general practitioner in Hawthorne, died on January 24 after a long illness. Born in Nazareth, Pennsylvania in 1912, Dr. Schafer was graduated from the University of Rochester School of Medicine, class of 1937 and came to New Jersey the following year. She had been affiliated with St. Joseph's Hospital in Paterson before retirement in the early 1970s.

Dr. Benjamin E. Shook

A retired member of our Hudson County component now living in Asbury Park, Benjamin E. Shook, M.D., died on January 30 at Jersey Shore Medical Center. A native of Indiana, Dr. Shook was graduated from Indiana University Medical School, class of 1921. He came to Jersey City to practice general medicine and was affiliated with Greenville Hospital and Jersey City Medical Center. Dr. Shook was 85 years old at the time of his death and had been a recipient of MSNJ's Golden Merit Award in 1971.

Dr. Stephen Silverman

At the untimely age of 40, Stephen A. Silverman, M.D., of New Brunswick died on December 22, 1979, after a long illness. A native of New York, Dr. Silverman was graduated from Tulane University School of Medicine in 1964 and pursued a residency in general surgery at the Veterans Administration Hospital in the Bronx, New York and in otolaryngology at New York Eye and Ear Infirmary. Before coming to New Jersey in 1973, he had been full-time director of residency training at the last-named institution. He was board certified in otolaryngology and a Fellow of the American College of Surgeons. Dr. Silverman was associated with Middlesex General and St. Peter's Hospitals in New Brunswick and was assistant professor of otolaryngology at Rutgers Medical School.

Dr. Thomas J. Summey

At the grand age of 92, Thomas J. Summey, M.D., formerly of Moorestown, and an emeritus member of our Burlington County component, died in Richmond, Virginia on January 22. Dr. Summey was graduated from Jefferson Medical College in 1915 and pursued a career in general surgery. He was certified by the American Board of Surgery of which he had been a founding member. He also was a Fellow of the American College of Surgeons and had been chief surgeon at the Burlington County Memorial Hospital in Mount Holly, subsequently becoming administrator and medical director of that institution. Dr. Summey retired from the latter post in 1960 after 30 years of service, during which time (through Dr. Summey's efforts) the Burlington County Memorial Hospital became approved for residencies in medicine, surgery, pathology, obstetrics and gynecology.

Dr. Henry R. Tatem

Henry R. Tatem, M.D., a senior member of our Camden County component, died on February 6 at West Jersey Hospital, Eastern Division, in Voorhees. A native of Collingswood, born in 1905, Dr. Tatem was graduated from Hahnemann Medical College in 1928 and pursued graduate work in surgery at Cook County Hospital in Chicago and University of Pennsylvania Hospital in Philadelphia. He was on the surgical staff at West Jersey Hospital in Camden for ten years and then established a general practice in Audubon until retiring in 1978. Dr. Tatem was honored recently at the dedication of the Tatem-Brown Family Practice Center of the West Jersey Hospital which opened on February 11 for the training of medical school graduates in the art of family practice. Dr. Tatem had been active in community affairs and was school physician for the Borough of Audubon. He was a recipient of MSNJ's Golden Merit Award in 1978 indicating 50 years of practice.

Dr. George F. Zinninger

A well-known researcher in the field of cancer and chairman of the department of radiation oncology at Cooper Medical Center, Camden, George F. Zinninger, M.D., died at that institution on February 3. A native of Cincinnati, Ohio, Dr. Zinninger was graduated from the University of Cincinnati School of Medicine in 1959 and pursued graduate work in medicine at Cincinnati General Hospital and in radiology at Massachusetts General Hospital in Boston. He had been in the private practice of radiotherapy in Boston and in Philadelphia (Jefferson Hospital) before coming to New Jersey. He was board certified in radiology and had been affiliated, in addition to those institutions already listed, with Garden State Community Hospital in Marlton, Our Lady of Lourdes Hospital in Camden, Underwood Memorial Hospital in Woodbury and Zurbrugg Memorial Hospital in Riverside. He was a member of the Radiology Society of North America and of the Oncology Society of New Jersey, and was the author of many articles in his field. Dr. Zinninger was only 46 years old at the time of his death.

BOOK REVIEWS

Current Medical Diagnosis and Treatment, 1980.

M.A. Krupp, M.D. and M.J. Chatton, M.D. Los Altos, CA, Lange, 1980. Illus. Pp. 1116. ($19)

This volume is the 19th annual revision of a work which has attained great popularity among generalists and family physicians as an "on-the-desk" reference. The authors have successfully met the challenge of keeping current, while avoiding controversy and unproved methods of diagnosis and treatment, and thus present most useful material with a conservative approach.

The book is divided into thirty-three chapters covering the major systems and organs, with diseases and conditions relating to each one, and seven chapters are devoted to infectious diseases. It is well indexed and subjects can be found readily. Each subject is followed by references to the general medical literature for the past five years.

I have a previous edition on my bookshelf and can attest, personally, to the great usefulness of this book. I recommend it to my colleagues in family practice and general internal medicine.

Joseph Peyser, M.D.

New Techniques and Concepts in Maternal and Fetal Medicine.

Harold A. Kaminetzky, M.D. and Leslie Iffy, M.D. New York, Van Nostrand Reinhold, 1979. Pp. 390. Illus. ($29.50)

Doctors Kaminetzky and Iffy have sought to memorialize their yearly Semmelweis Seminars by selecting over two dozen lectures in maternal and fetal medicine, presenting them in written versions, and offering them to the medical profession in a single attractive volume. The topics for the most part have been well selected by the editors and well presented by the authors. This volume serves an important purpose for the neonatologist and for the physician interested in maternal and fetal medicine who was unable to attend the third and fourth annual Semmelweis Seminars and to participate in the discussions. Such physicians undoubtedly would benefit from reading and studying this volume. However, the practicing obstetrician and pediatrician striving to keep up-to-date with the increasing avalanche of published material, as well as with the latest information (including a rehash of old information with new and revised nomenclatures) from courses and meetings might be disappointed with this book. The private practitioner seeking significant facts useful in daily clinical experience and brief lucid explanations of complicated problems might be overwhelmed by the abundance of detail, analyses of statistics, and corroborative studies. The reviewer failed to comprehend Doctor Randall's theories on physician education in the first chapter and to discern their relevance to academic or clinical life in general or to maternal and fetal medicine in particular.

Jerome Abrams, M.D.

Consultation With A Cardiologist— Vol. I: Prevention; Vol. II: Management.

J.I. Haft, M.D. and Saretta Berlin. Chicago, Nelson-Hall, 1979. Vol. I—pp. 317 ($18.95); Vol. II—pp. 208 ($14.95)

These two volumes, aimed at the "concerned layman" and the "informed patient," fill a huge void between the simplistic, be-your-own-cardiologist manuals and the overly technical, pontifical and scary tomes that are currently available to the potential or actual cardiac patient. Dr. Haft deals openly and thoroughly with nearly all of the contemporary issues involved in the prevention and management of coronary heart disease. There is a minimum of dogma, a concerned effort to present fairly technical information in a readable form, and a fair sprinkling of paternalistic advice garnered from a long clinical experience.

My only major criticism is that there is considerable repetition in volume two, and I think the volumes easily could have been combined. In the introductory chapter, the authors fail to mention the recent and, as yet unexplained, nearly universal *decrease* in the incidence of coronary heart disease. The pathogenesis of heart attack (Vol. 1, p. 27) is oversimplified, and the terms "coronary thrombosis, occlusion, and myocardial infarction" really are not synonymous. Most cardiologists would agree that the ECG is often normal, rather than rarely, in the presence of coronary artery disease (Vol. 1, p. 64), and that the VCG really doesn't present "considerably more information than a standard ECG," but rather displays the same information in a different manner (Vol. 1, p. 67). While control of hypertension clearly reduces stroke and kidney damage, the same is not true for myocardial infarction, to my knowledge (Vol. 1, Chapter 5). Counterpulsation (Vol. 2, p. 108) really is not an auxiliary heart; rather it works by reducing oxygen demand in systole and increasing coronary perfusion in diastole. Dr. Haft's approach to the post-infarct patient (Vol. 2, pp. 111-115) seems overly conservative especially in terms of duration of hospital stay and home care.

"Everything Affects the Heart" (Vol. 1, Chapter 12) is pithy and especially well done as are the sections on diet, exercise, sexual activity and clotting antagonists.

This very good book will not provide easy reading for the average layman; yet, the time invested will yield important dividends of awareness, security, and optimism.

Edwin L. Rothfeld, M.D.



MORRIS COUNTY

FLORHAM PARK, For Sale by Owner, 3-bedroomed Colonial, including private Office Suite with separate entrance, parking; Residence includes new custom kitchen, parquet floor, fireplace. Redwood deck overlooking parklike setting. Low taxes and depreciation on office suite. $136,500.00 Tel: (201)822-3013 or 377-0200.

OFFICE LOCATIONS??

HOME-OFFICE COMBINATION—VICTORIAN PROFESSIONAL. Waiting Room, Receptionist Area and 4 Examining/Treatment Rooms on Lower Level. Living Room, Dining Room, Kitchen, 2 Bedrooms, Bath Upstairs. Beautiful scenic view from 3rd floor skylights.
FREEHOLD BORO $115,000.

PROFESSIONAL LOCATION—CUSTOM-BUILT COLONIAL. On over 1/2 Acre. Living room, Dining Room, Kitchen, Family Room. 3 Bedrooms, 2 Baths, Utility Room. Oak flooring. Slate tile Foyer. Appliances. Anderson Thermopane Windows throughout. Adequate parking area for professional office. Zoned commercial. Near Freehold Hospital.
FREEHOLD TWP. $99,900.

Call or write for photo listings and additional details. 462-6464

BEN ALPERN REALTORS
46 West Main Street Freehold, New Jersey 07728



ULTIMATE IN ELEGANCE

Resting on 2 acres of beautifully elevated tree shaded grounds, this impressive ENGLISH MANOR HOUSE has a breathtaking view of the New York skyline.

Luxurious Features include:

- HAND CARVED MOULDINGS AND WOODWORK PANELS AND BEAMS
- 7 DISTINCTIVE FIREPLACES
- MODERN KITCHEN AND BATHS
- 26' x 23' ENTRY HALL
- DRAMATIC 38' 23' SUNKEN LIVING ROOM
- 22' x 18' DINING ROOM
- 16' x 13' LIBRARY w/MARBLE FIREPLACE
- 18' x 20' FAMILY ROOM
- LOVELY 2 ROOM MASTER BEDROOM SUITE
- BEAUTIFUL FORMAL GARDENS

Located on the finest street in the prestigious community of Montclair and only a few minutes from most major metropolitan hospital centers, 20 minutes from N.Y.C. and close to routes 280, 287, 80, 23, 46 and 10.
CALL FOR BROCHURE—
CEDARCREST REALTY INC. 201-228-1050
OFFERED AT $350,000

OFFICE SPACE FOR RENT

Office space available in attractive new professional building located on Main Street in center of town, central New Jersey area, with large hospital five minutes away. Presently, one active medical office in town of 14,000 plus. Presents an unusual opportunity for an immediately successful practice.

Call (201) 722-2928 for additional information.

SYCAMORE
PROFESSIONAL BUILDING
Tinton Falls (Monmouth County)

One Suite now available (1100+ sq. ft.) in well established Medical Building. Suitable for any Medical Specialty. Beautifully landscaped on a busy thoroughfare, ample parking. Will finish to suit.

Call Dr. S. Furman
(201) 542-4433

MEDICAL DIRECTOR

Position of Chief of Medical Department and Director of Medical School Affiliated Medical Residency Program in approximately 400 bed general, non-profit hospital. Available July 1 or sooner. Active teaching program with multiple sub-specialty divisions in the department. Salary commensurate with qualifications. Apply to:

Medical Department Search Committee
c/o Mr. William T. Payne, Jr.
Administrator
Helene Fuld Medical Center
750 Brunswick Ave.
Trenton, N.J. 08638

SURGICAL ASSISTANTS

New Jersey licensed Physicians needed July 1, 1980 for house Surgical Assistants in 375-bed medical center.

Assist in Operating Room (general surgery & Gyn) and cover house for surgical patients nights & weekends.

Excellent salary and fringe benefits program including malpractice insurance.

Submit resume to: Harry S. DiMemmo
Asst. Admin.
HELENE FULD MEDICAL CENTER
750 Brunswick Avenue
Trenton, New Jersey 08638

Equal Opportunity Employer M/F

"**FAMILY PHYSICIAN** only for one of the largest family practice facilities in the state. Work solo or with group. Thousands of new homes built and planned for the area. Beautiful new office space and equipment. The only private fully staffed day and night facility open seven days a week in the state. Excellent benefits with time off.

THE DAVID L. ROSENBERG MEDICAL CENTER IN EAST BRUNSWICK, N.J.
(201) 238-6200
Benjamin Levine M.D.

N.J. Veterans Administration Medical Center

Position will shortly be available as Assistant Chief, Urology Section at the East Orange, New Jersey Veterans Administration Medical Center. Salary will be in accordance with qualifications. (Up to $47,500 P.A. plus generous bonus and fringe benefits). This position, located in a modern and progressive teaching hospital will be available by the end of August. Please apply to the Chief of Urology, Dr. Sporer. An equal opportunity affirmative action employer.

Picture yourself as an Air Force Physician

Consider an excellent income without overhead cost or red tape. Thirty days of paid vacation each year. Associates to care for your patients while you're away. Continued professional education. An income that continues if you're ill. Medical care for yourself and your family. And, if you qualify, a lifetime retirement income equivalent to half your base salary after only 20 years of active duty.

Additionally, well-equipped and well-staffed hospitals and clinics provide an excellent environment for your profession. And we know that's important to you.

Put yourself in the picture of good health care in the Air Force Medical Service.

For more information, contact:

Northern NJ
Capt. Richard T. Chamberlain
USAF Medical Recruiting
376 Hamburg Turnpike
Wayne, NJ 07470

Southern NJ
Capt. Marty Csercsevits
USAF Medical Recruiting
2201 Rt. 38, Suite 730
Cherry Hill, NJ 08002

Air Force. A great way of life.

RESIDENCY IN PHYSICAL MEDICINE AND REHABILITATION

Dynamic, young program with balanced academic and clinical emphasis under the supervision of 10 physiatrists. Three year program and integrated internship/residency with opportunity for research and pursuit of special interests both in medical school and private hospital settings. Stipends from $14,900 to $17,000 depending on qualifications. We will pay for visits in selected cases. Equal Opportunity/Affirmative Action Employer. Telephone or write for information to:

John F. Ditunno, Jr., M.D., Director
Department of Rehabilitation Medicine
Thomas Jefferson University Hospital
11th and Walnut Street
Philadelphia, Pa. 19107
Telephone: (215) 928-6573

Just what the doctor ordered.

Aesthetic professional offices at the ideal Monmouth County location

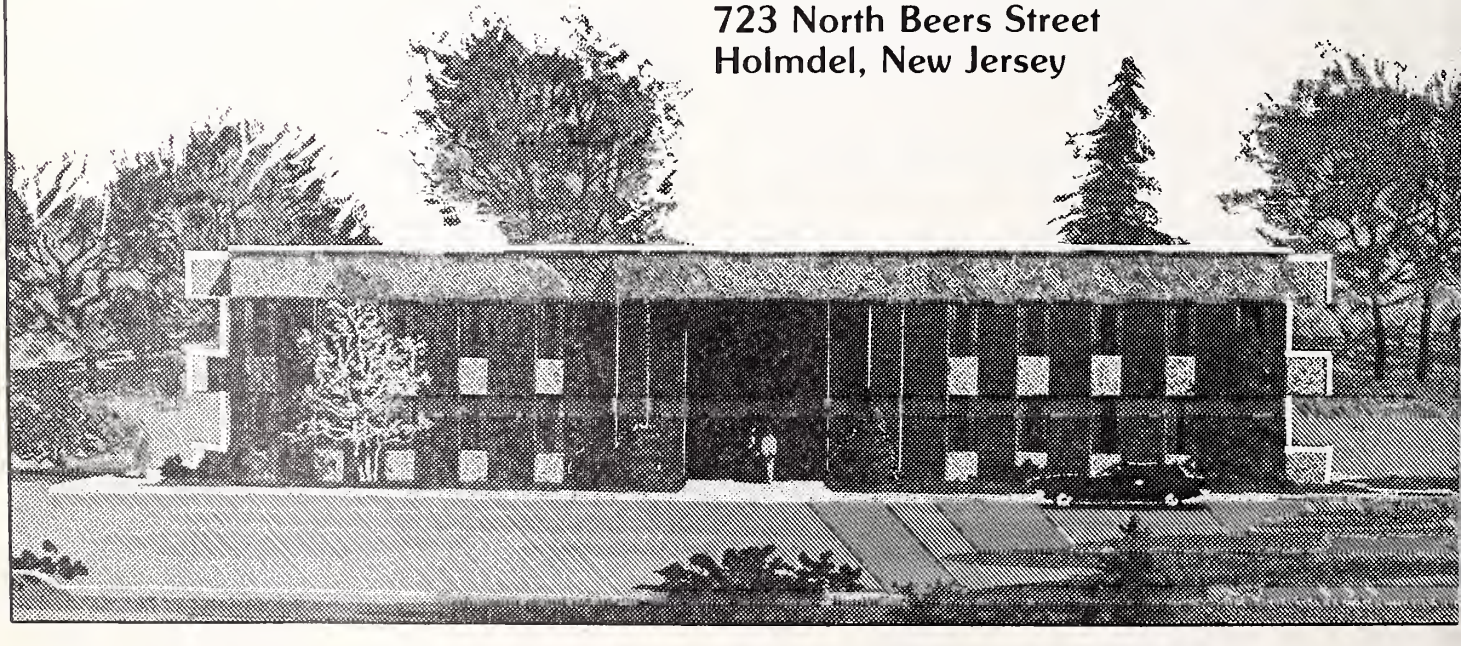
OWNERS/MANAGERS
Bart Associates
Arthur Kligman
Barry Rosenson
121 Shelly Drive
Hackettstown, N.J. 07840
(201) 852-5111

Directions: Garden State Parkway Exit 117, then 1st right after toll(Clark St.), then follow Hospital signs to North Beers Street, then right to the building.

• Immediate access to the hospital (approximately 200 feet separates the two buildings). • Convenient location, just one mile south of Garden State Parkway Exit 117. • Private entrances (2) to each suite. • Doctors' all-day use of Plaza parking lot (ability to either make hospital rounds or attend office patients). • Office floor plans designed to meet specific needs. • Elegant office appointments, including carpeting throughout. • Plush-paneled entrance lobby. • Abundant on-site parking, including handicapped spaces. • Wheelchair ramps. • Lush landscaping. • Individual thermostats in each suite controlled by tenant for both air-conditioning and natural gas heating. • Steel and masonry construction throughout. • All suites have exterior windows with insulated tinted glass. • All utilities are included in rent (subject to escalations). • Acoustical tile ceilings with recessed fluorescent lighting. • Between-suite soundproofing. • Modern security lighting. • Professional interior/exterior maintenance. • 16,000 square feet. • Will divide and partition to suit.

GARDEN STATE MEDICAL ARTS PLAZA

Adjoining Bayshore Community Hospital
723 North Beers Street
Holmdel, New Jersey



CLASSIFIED ADVERTISEMENTS

PEDIATRIC ASSOCIATE—New Jersey Shore area. 1 1/2 hours to New York City and Philadelphia. Write Box No. 183, c/o JOURNAL MSNJ.

DERMATOLOGIST—Board certified. Seeks association or sale of practice in Northern or Central Jersey. Call (212) 427-3498 (after 6 p.m.).

INTERNIST—Board eligible, American graduate with educational background seeks teaching position and/or partnership. Fully licensed. Fluent Spanish. Write Box No. 187, c/o JOURNAL MSNJ.

INTERNIST—Seeking single or multi-specialty group practice, partnership in North or Central New Jersey. Well trained at busy N.Y.C. hospital. Available July 1980. B. Barcevac, M.D., 2795 Shore Parkway, 1G, Brooklyn, N.Y. 11223. (212) 743-4100.

OPHTHALMOLOGIST—Board eligible. Fellow in corneal disease. Seeks association or sale of practice in North or Central Jersey. Call (212) 427-3498 (after 6 p.m.).

OPHTHALMOLOGIST—Presently in practice elsewhere. Wishes to associate with or take over an established practice in New Jersey. Write Box No. 182, c/o JOURNAL MSNJ.

RADIOLOGIST—Board certified in radiology and nuclear medicine. Currently associated with a teaching hospital. Desires relocation in South Jersey area. Part-time position considered. Reply Box No. 184, c/o JOURNAL MSNJ.

THORACIC SURGEON—Board eligible, university trained. Single specialty group, partnership or institutional. Available July 1980. Call (212) 893-4745.

UROLOGIST—Well trained at major N.Y.C. university center. Available July 1980. Will consider all types of practice. G. Rosenberg, M.D., 205 W. 15th St., N.Y.C. 10011.

EMERGENCY ROOM PHYSICIAN—Full or Part Time. Central New Jersey. Academically oriented. Modern Facility. Financially rewarding. E.V. McGinley, M.D. (201) 277-0441.

FAMILY PRACTITIONER/GENERAL PRACTITIONER—For vigorous growing Family Practice Department in a large multi-specialty group in Northern New Jersey. Please reply to Box No. 188, c/o JOURNAL MSNJ.

PEDIATRICIAN—To join established practice in Bergen County in July 1980. Board eligible or certified. Excellent opportunity. Write Box No. 175, c/o JOURNAL MSNJ.

PHYSICIAN—Industrial Clinic. Elizabeth, New Jersey. Six hours a day, 9-3 p.m., Monday thru Friday. Call (201) 467-0522 after 7 p.m.

GENERAL MEDICAL PRACTICE—Unexpected availability of busy general medical practice and completely equipped office. (201) 521-0881.

USED MEDICAL EQUIPMENT—Desired by young internist/gastroenterologist setting up solo practice in South Jersey—EKG machine, exam tables, viewing boxes, etc. (215) 848-0936 (evenings).

FOR SALE—Brick, N.J. Excellent area, executive style custom built 2 story, 8 year old colonial. Excellent condition, 5 bedrooms, 4 baths, formal living room and dining room; game room, family room with fireplace, Den/office, 3 zone gas heat/air conditioning, w/w carpet over hardwood floors, screen porch, fenced, landscaped, sprinkler system. Principles only, asking $125,000. (201) 477-8882.

FOR SALE—Home/office of general practitioner. 30 miles from New York City. Practice for price of home. Write Box No. 186, c/o JOURNAL MSNJ.

FOR SALE—Maplewood. Unusual set-up in excellent area. Prime condition, family practice. Write P.O. Box 202, Maplewood, N.J. 07040.

FOR SALE—Office/Home. Union County. Elegant, modern split level home-office with private entrances in affluent area. Equipped office with x-ray. High net Family Practice, chiefly Internal Medicine. Retiring. Near seashore, New York City. Good schools. Hospital 10 minutes. Write Box No. 172, c/o JOURNAL MSNJ.

FOR RENT—Medical Office Space. New and fully equipped, part/full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE TO SHARE—Bergen County. Fully equipped for elective surgery with operating and recovery. Ideal for Eye, ENT, Plastic. In Fort Lee, convenient to all northern Jersey, New York, Westchester and Long Island. Modern skyscraper, private entrance, parking. Will subdivide to suit. Write Box No. 176, c/o JOURNAL MSNJ.

OFFICE SPACE—Hunterdon County. For family practitioner(s) in modern professional building in growing suburban community. 5 rooms $370; 7 rooms $475. Write R.D. 1, Box 247, Milford, N.J. 08848. (201) 995-2365.

OFFICE SPACE—Professional Office for Lease. Morris County, New Jersey. Telephone (201) 366-2557.

FOR RENT—Physician's office. Furnished. Centrally located in New Brunswick. Call (201) 545-1660.

SPACE—New medical office building in Somerset County. Two suites available. Pediatrician, Family Practitioner or Surgical specialist especially needed. Excellent location with hospital and medical school affiliation possible. Call (201) 754-4111.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

PERSONNEL—See Page 313
REAL ESTATE—See Pages 312, 314

NEEMA EMERGENCY MEDICAL
—a professional association—

EMERGENCY MEDICINE POSITIONS: available with emergency physician group throughout Pa., N.Y., N.J., Mich. and Southeastern U.S. including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits towards board certification. Physician department directors also desired. Please send resume to:

NEEMA Emergency Medical
Ste 400
399 Market St.
Phila., Pa. 19106

In PA call
(215) 925-3511
Those outside of PA call
(800) 523-0776

ACCOUNTS RECEIVABLE PROBLEMS?

N.J. Attorney
To Handle Collection Matters
FEE: 25% Of Amount Collected
For information call:

(201) 677-9330

GROSS & SCHARF
Financial Consultants, Ltd.

"INTEGRITY"

HARRY S. GROSS, CPA
ALAN SCHARF, CPA

1520 LOCUST STREET
PHILADELPHIA, PA 19102
(215) 735-6120

Personal Financial Planning

NOW
a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE
COMPETITIVE RATES
OPEN ENROLLMENT JUNE AND DECEMBER

For More Information Contact
Donald F. Smith and Associates
Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield



LIBRARY
U.C. SAN FRANCISCO
JUN 11 1980

The Library
Acquisitions Division
Univ. of Calif., San Francisco
San Francisco, Calif. 94143 S

May 1980

Journal of the Medical Society of New Jersey

Anorexia Nervosa:
Clinical Syndrome
Ira L. Mintz, M.D.

Family Profile
C. Philip Wilson, M.D.

Legionnaires' Disease
A. Ackley, M.D., et al.

Obstetrics and Gynecology Update
L. Iffy, M.D., et al.

Refractory Ventricular Tachycardia
E. L. Rothfeld, M.D.

Complete Table of Contents on Page 320

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____

for "cardiac separation"...



Although over 80% of post-coronary patients can resume normal marital sexual activity, fear of anginal pain often results in "cardiac separation" between patients and their families.

You can help minimize "cardiac separation" with a program of counseling and often, with a prescription for Cardilate® (erythrityl tetranitrate).

Cardilate® increases exercise tolerance, helps patients return to more normal levels of activity—including sexual activity. Sublingually, Cardilate begins to work within 5 minutes, eliminating or reducing frequency and severity of anginal pain for up to 2 hours.

counsel & Cardilate® (erythrityl tetranitrate)

CARDILATE® (ERYTHRITYL TETRANITRATE)

INDICATIONS: Cardilate (Erythrityl Tetranitrate) is intended for the prophylaxis and long-term treatment of patients with frequent or recurrent anginal pain and reduced exercise tolerance associated with angina pectoris, rather than for the treatment of the acute attack of angina pectoris, since its onset is somewhat slower than that of nitroglycerin.

CONTRAINDICATIONS: Idiosyncrasy to this drug

WARNING: Data supporting the use of nitrates during the early days of the acute phase of myocardial infarction (the period during which clinical and laboratory findings are unstable) are insufficient to establish safety

PRECAUTIONS: Intraocular pressure is increased, therefore, caution is required in administering to patients with glaucoma. Tolerance to this drug, and cross-tolerance to other nitrites and nitrates may occur

ADVERSE REACTIONS: Cutaneous vasodilation with flushing. Headache is common and may be severe and persistent. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop. This drug can act as a physiological antagonist to norepinephrine, acetylcholine, histamine and many other agents. An occasional individual exhibits marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration and collapse) can occur even with the usual therapeutic dose. Alcohol may enhance this effect. Drug rash and/or exfoliative dermatitis may occasionally occur

DOSAGE AND ADMINISTRATION

Oral/Sublingual Tablets: Cardilate (Erythrityl Tetranitrate) may be administered either sublingually or orally. Therapy may be initiated with 10 mg. prior to each anticipated physical or emotional stress and at bedtime for patients subject to nocturnal attacks. The dose may be increased or decreased as needed

HOW SUPPLIED

CARDILATE (Erythrityl Tetranitrate) TABLETS (Scored)
for ORAL or SUBLINGUAL USE 5 mg: Bottle of 100.
10 mg: Bottles of 100 and 1000. 15 mg: Bottle of 100

Reference: 1. Hellerstein HK, Friedman EH: Sexual activity and the postcoronary patient. Arch Intern Med 125:987, 1970

Burroughs Wellcome Co.,
Research Triangle Park, North Carolina 27709

ONE HUNDRED YEARS WELLCOME

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
PRESIDENT-ELECT
Augustus L. Baker, Jr., M.D. (Morris) Dover
FIRST VICE-PRESIDENT
Armando F. Goracci, M.D. (Gloucester) Woodbury
SECOND VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
IMMEDIATE PAST-PRESIDENT
Charles S. Krueger, M.D. (Burlington) Mount Holly
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
James S. Todd, M.D. (1980) (Bergen) Ridgewood
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Palma E. Formica, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1980) (Cumberland) Bridgeton
William Greifinger, M.D. (1981) (Essex) Belleville
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Alexander Kovacs, M.D. (1981) (Union) Scotch Plains
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1980) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Vacancy
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1980) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1980) Haddonfield
Karl T. Franzoni, M.D. (1980) Trenton
Henry J. Mineur, M.D. (1980) Cranford
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

May 1980

Publication Committee

John F. Marshall, M.D., *Chairman*
Julio C. del Castillo, M.D.
Paul J. Hirsch, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 911. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies, $1. Address communications to *The Journal,* MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

May 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

324 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

329 Anorexia Nervosa: A Spectrum

329 Insurance Coverage: A New Look

ORIGINAL ARTICLES

333 Anorexia Nervosa: Clinical Syndrome and Its Dynamic Implications
Ira L. Mintz, M.D., Englewood

341 Family Psychological Profile of Anorexia Nervosa Patients
C. Philip Wilson, M.D., New York City

347 Legionnaires' Disease: Two-Year Experience
A. Ackley, M.D.; D. J. Gocke, M.D.; D.V. Alcid, M.D.; M. P. Weinstein, M.D., Piscataway

CASE REPORTS

355 Congenital Double Gastric Pylorus
U. A. Parkhill, M.D., Neptune; K. Kassis, M.D., Atlantic City

358 Gastric Duplication Cyst
I. M. Ibrahim, M.D.; M. Moss, M.D.; M. Jarrah, M.D.; M. Ballas, M.D.; H. Dardik, M.D., Englewood

REVIEW ARTICLE

362 Update of Developments in Obstetrics and Gynecology
L. Iffy, M.D.; J. R. Jones, M.D.; T. F. Rocereto, M.D.; J. P. Thompson, M.D., Paterson

STATE OF THE ART

367 Management of Refractory Ventricular Tachycardia
Edwin L. Rothfeld, M.D., Newark

371 **THERAPEUTIC DRUG INFORMATION**

373 **PEDIATRIC BRIEFS**

375 **YOUR CONGRESSMAN SPEAKS**
Federal Support for Health Programs
The Honorable Edward J. Patten, Washington, D.C.

378 **HELP FOR IMPAIRED PHYSICIANS**

380 **DOCTORS' NOTEBOOK**

386 **LETTERS TO THE JOURNAL**

389 **CME CALENDAR**

391 **OBITUARIES**

Cover

The cover is a pen-and-ink drawing by Elizabeth Ruggles. Miss Ruggles is a well-known teacher and painter in the area and formerly was staff artist for the New Jersey State Department of Health.

Volume 77
Number 5

Pages 317-396



Introducing Our Medical Director

Bertrand J. Bensam, MD, was born and raised in Brooklyn. In 1957, he graduated from Brooklyn College, cum laude with a BS degree. In 1961, he received his MD degree from Upstate Medical Center.

He served his internship and general surgical and orthopedic residencies at the combined Hospitals of New Haven and was awarded a one-year fellowship in pediatric orthopedics at the Joseph P. Kennedy, Jr., Memorial Hospital in Brighton, Mass.

Following certification in Orthopedics in 1970 and group practice at the Robert Packer Hospital in Sayre, PA, he became a Fellow of the Institute of Physical Medicine and Rehabilitation in 1974. Upon completion of the Fellowship, he was appointed Chief of Howard A. Rusk Respiratory Rehabilitation Center and was certified by the American Board of Physical Medicine in 1977. In April, 1979, he joined NJR as Medical Director.

Dr. Bensam's speciality encompasses respiratory support, spinal cord support, care of central nervous system disorders of catastrophically disabled patients, trauma, spontaneous hemorrhaging, specific diseases of the central nervous system — such as polio, and chronic pain syndrome. He is licensed to practice in New Jersey, Connecticut, New York, and Pennsylvania.



New Jersey Rehabilitation Hospital

240 Central Avenue, East Orange, NJ 07018 • 201-673-1860

Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics Inc.

Information for Readers and Contributors

The Journal, the official organ of the Medical Society of New Jersey is published monthly under the direction of the Committee on Publication. Released the first week of the month, a copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles*, based on research, original concepts relative to epidemiology of disease, and treatment methodology; *case reports*, based on unusual clinical experiences; *review articles; clinical notes*, succinct items on some aspect or new observation or technique of a case experience; and *special articles*, which may include evaluations, policy and position papers, and reviews of non-scientific subjects. Material submitted here is for exclusive publication in *The Journal*. Upon request of the author, the Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal*. The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal, MSNJ.*"

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten double-spaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editors. Authors must understand that the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data or special photographs).

Tables and Illustrations—Tables must be typewritten, double-spaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page—The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References, which should not exceed 35 citations except in review articles, should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed double-spaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus*.

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis*. New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Manuscript Review Board, who render an opinion to the Editor. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar may not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

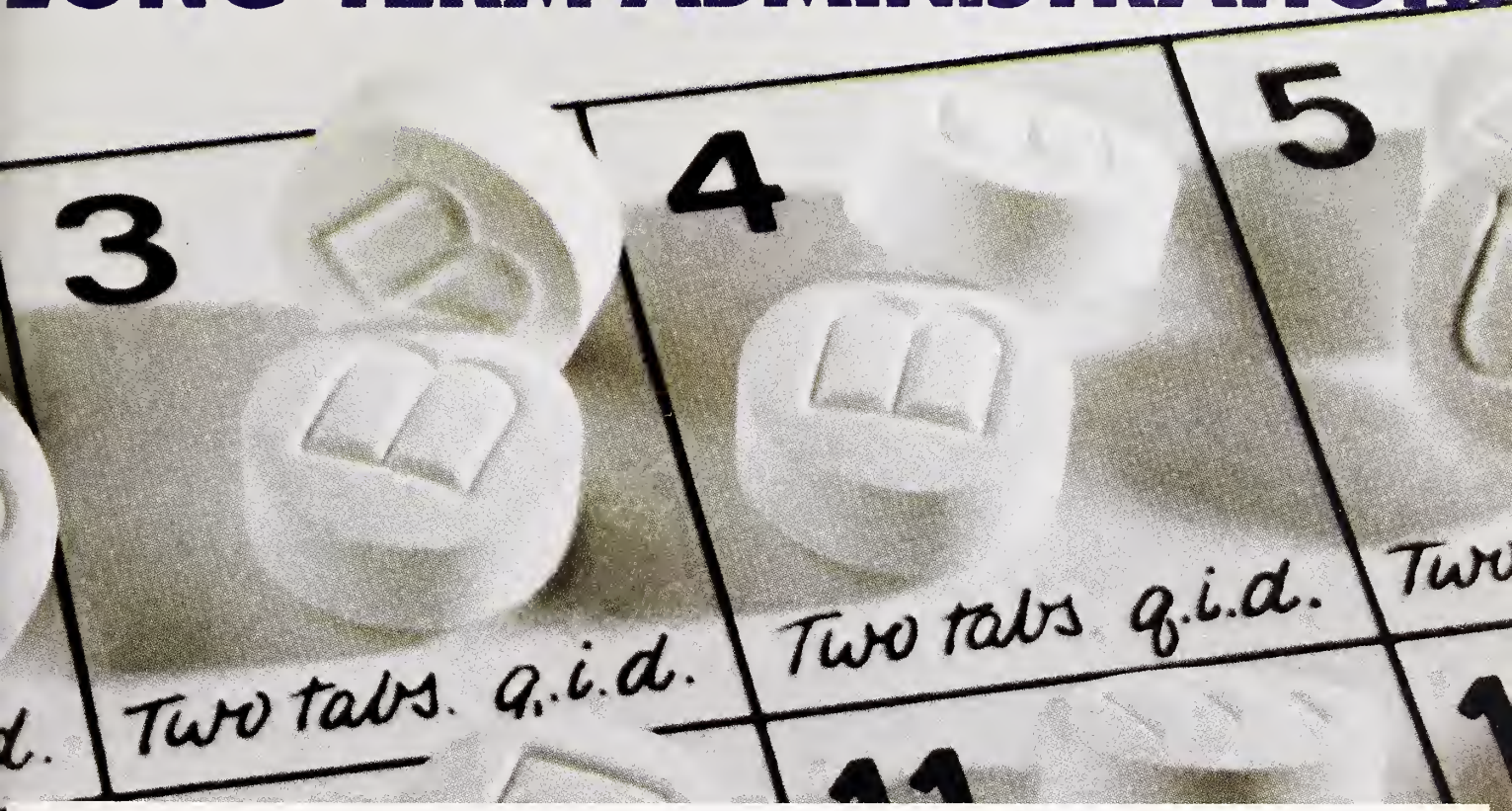
Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal*, MSNJ, 2 Princess Rd., Lawrenceville, N.J. 08648.

Are you prescribing a regimen of PLAIN ASPIRIN EVERY DAY?

BUFFERIN® WAS SIGNIFICANTLY BETTER TOLERATED IN LONG-TERM ADMINISTRATION.





In a particular series of 14-day gastric tolerance studies among 182 normal subjects, 49% suffered G.I. upset from plain aspirin. Most of these subjects took BUFFERIN without discomfort.

Subjects in these controlled trials, which utilized a crossover design, were given Bufferin and Bayer® Aspirin for two weeks each in a balanced order of administration. The cumulative gastric tolerance superiority of Bufferin over plain aspirin was significant ($P = <.01$) from day one and persisting through each day of the study. This superiority for an extended period could be of particular importance to patients on repeat-dosage schedules.

For full aspirin benefits, together with excellent gastric tolerance, Bufferin should be your brand of choice. If you are prescribing a regimented daily dose of aspirin, prescribe Bufferin—the repeat-dosage aspirin—instead.

BUFFERIN: The Repeat-Dosage Aspirin.

For complimentary samples of Bufferin and Arthritis Strength Bufferin, please write: Bufferin, P.O. Box 65, Elizabeth, New Jersey 07207.
Composition: Each Bufferin tablet contains aspirin 324 mg. and the antacid Di-Alminate® (Bristol-Myers' brand of Aluminum Glycinate 48.6 mg. and Magnesium Carbonate 97.2 mg.).

©1978, Bristol-Myers Co.

Featuring: A Look at New Jersey Professional Liability Insurance

Physician Penmanship: Clearly Illegible

NJ PROFESSIONAL LIABILITY INSURANCE

Hon. James J. Sheeran
Commissioner of Insurance

Looking at professional liability insurance from my point of view as the regulatory authority, I am most pleased with the stability that now characterizes the marketplace. Malpractice insurance is now readily available and the cost, in some areas, has been reduced significantly.

For a while, though, it appeared that my twin goals of availability and affordability were unattainable in a marketplace so chaotic that at one time a group of respected specialists even threatened to withhold non-emergency services unless its members were assured of getting the coverage they thought they needed.

It took firm, assiduous effort on the part of the administration, the legislature and the medical and allied professions themselves to bring order out of chaos and free doctors from the burdensome distraction of having to worry about coverage. Continued cooperation among the various interests should help preserve what we have gained the last few years.

Nevertheless, there always will be some uncertainty in the matter of rates. They tend to fluctuate from year to year but that should be no great problem if the fluctuation is not excessive.

Last year I was able to reduce the average rates for the Medical Inter-Insurance Exchange 8.3 percent. This year I had to increase them 7.9 percent in response to actuarial analyses and projections of what lies ahead in 1980. The new rates, despite the increase, on the average still will be less than they were two years ago.

In view of the decrease I approved last year, how could I or anyone expect that within another 12 months I would be called upon to approve an increase?

Contributing to the uncertainty is the "long tail" phenomenon, which means that it will be some time in the future before all the claims arising out of this year's insured acts will be reported. The longer a claim goes unsettled, the higher the cost of handling it and the more that inflation affects the size of any settlement or jury award.

For every substantive claim reported, the insurer must set up a case reserve, which is its best estimate of the probable amount of ultimate payment and the expenses that will be involved in disposition of the claims. Another reserve is the "incurred but not reported reserve," or IBNR. This is a reserve, based on past experience, that provides for losses that may have occurred during the year, but not yet have been reported. These losses will be reported over the period covered by the long tail.

Present rate-making techniques must take these claims into account with the objective of having enough money in reserves at the end of any given year to pay all the claims arising from incidents which occurred that year.

While rates are thus subject to fluctuation, I see no reason, in looking to the future, why the market ever again should be subjected to the unrest that beset it in the mid 1970's. Moreover, I foresee a resurgence, faint at the moment but possibly growing stronger, of competition, which has been stifled so long. I often have stated in the past that the principal problem with the malpractice insurance market was the lack of competition.

NEW JERSEY WRONGFUL DEATH CLAIM NOT PRECLUDED BY PRIOR MALPRACTICE RECOVERY

A patient, who underwent subtotal thyroidectomies in 1960 and 1965, filed a malpractice suit against her physician alleging negligent surgical procedures causing damages to, and removal of, her parathyroid glands resulting in hypocalcemia. A jury returned a verdict of $100,000 in favor of the patient.

In March 1974, the patient died and two years later the patient's parents and child filed a wrongful death action against the physician alleging the death was due to the physician's malpractice established in the prior action.

The Appellate Court concluded that a wrongful death action was a separate and independant right of action in the patient's survivors and they could recover funeral expenses, burial expenses, and pecuniary value of lost services, including the deprivation to the patient's daughter of her mother's care, nurture, and guidance during maturity.

This type of action is prevented by the insertion of a clause in the **release** regarding satisfaction of damages that may accrue in the future as a result of the death of plaintiff.

On January 21, 1980, the New Jersey Supreme Court heard arguments regarding the Appellate Court's decision in this case. This column will report upon the New Jersey Supreme Court decision when it is released.

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

PHYSICIAN PENMANSHIP: CLEARLY ILLEGIBLE

At a recent peer review of an alleged malpractice claim, three physicians reviewing the medical records commented on their difficulty in attempting to decipher the defendant physician's handwriting. "That's a distinguishing characteristic of physicians," chortled one reviewer.

Many humorous stories may make light of physicians' penmanship, but the difficulties that arise from illegible physician handwriting are far from humorous. The November issue of *JAMA* reported on a study of physicians' handwriting conducted in a 500-bed hospital. The results of the study found one-third of the physicians' handwriting to be illegible. The study concluded that illegible physician handwriting created a loss of time to nurses in their care of patients and could be directly attributable to liability claims.

As an alternative, some physicians have elected to tape record patient medical histories, diagnoses, and treatments, as well as their written notations in hospital medical records, for later transcription by office staff. The transcripts become part of the physicians' office files of patients' records and/or attachments to the hospital medical records. A clear, concise, readable report assists in the reduction of errors in patient care, as well as being of benefit in the defense of an alleged liability claim.

One orthopedic surgeon is known to have a stenographer seated behind a screen to record all medical information of a patient's examination. During a malpractice trial involving this physician, the stenographer was able to produce and read her transcriptions of an examination that had taken place nearly three years ago. Cross examination by the plaintiff's attorney revealed that the stenographer had never destroyed any of her "steno" books during the seven years she was employed by the physician. The stenographer's testimony, coupled with her steno books, and the typed medical records aided in a decision in favor of the defendant physician.

Taking the time to record medical information legibly or choosing an alternative means of achieving clear, concise readable records is an obligation physicians have to themselves, the medical profession, and more significantly, to good patient care.

DID YOU KNOW

. . . Because of age and life earnings' expectations malpractice awards for Medicare patients are 66 percent less than the overall average awards.

. . . The majority of diagnostic errors are attributed to inadequate information, particularly inadequate examinations and tests, rather than misinterpretation of the correct diagnostic information.

. . . "Podiatry is different than medicine, and so a podiatrist's challenge to a plaintiff who sought a stated amount in damages ($500,000)—in violation of New York's medical malpractice law—failed. The podiatrist moved to strike the complaint on grounds it violated the law by specifying damages, but the court ruled differently, saying podiatry was separate and distinct from the practice of medicine and thus the action was not one for medical malpractice" '. *(Malpractice Lifeline,* February 26, 1980)

From the *The Record That Defends Its Friends:*

. . . "One of the most embarrassing and damning ploys the plaintiff's attorney uses is to ask a doctor, nurse or therapist to read an entry he or she wrote, only to have the practitioners find it is so illegible they cannot decipher it."

. . . "When the record has been tampered with, an insurance company will almost invariably settle, even if the case has much intrinsic merit."

. . . "On average, malpractice suits take place three to four years after the incident. Witnesses are unavailable. Memories dim, but the record remains."

. . . "In court, the medical record is the care rendered. If it isn't in the record, it didn't happen."

. . . "The plaintiff's attorney and his expert witnesses have all the advantages of Monday-morning quarterbacks. They know the outcome and can be God-like in their criticism of decisions made and actions taken in the stress and ambiguity of the treatment situation, where often, no perfect answers exist—but you have the game film—the record—and it can be your best protection." *(Care Communications, Inc.,* 1979)

CASE SURVEY

A ten-year-old boy, injured while playing football and complaining of pain in his right thigh, was brought to the emergency room by his parents. The boy held his knee and had little movement without extreme pain. The emergency room physician examined him for a possible fracture, and requested an x-ray of the right thigh. Results of the x-ray were read by the resident radiologist as no fracture, but he noted that the boy was in extreme pain. The emergency room physician discharged the patient as having a muscle strain and prescribed heat, an ace bandage, and crutches. The following day the chief radiologist in reviewing the previous day's x-ray readings, questioned the resident regarding an area in the upper right corner of an x-ray of the patient under discussion. The resident assured the radiologist that this was not a fracture and that he "had seen patient." Several days later the boy was taken to an orthopaedic surgeon who discovered that the right hip was dislocated resulting in asceptic necrosis of the femoral head with possible loss of the right hip.

A peer review determined that the emergency room physician had not taken an adequate history to ascertain how the boy had been struck while playing football. It was further determined that an inadequate physicial examination was performed, particularly since the focus of this examination was limited to the thigh and knee. The extreme pain exhibited by the boy should have been a clue to more than a muscle strain and an orthopaedic surgeon should have been called.

The peer review also determined that the resident radiologist had conducted no history or examination of the patient, and had merely "seen him" from the doorway while the technician was taking x-rays of the patient.

The chief radiologist accepted the decision of the resident when in fact he felt the x-ray was read incorrectly with a possible misdiagnosis. The peer review found this case to be indefensible resulting in a settlement against the emergency room physician, the chief radiologist, the resident radiologist and the hospital.

Asking proper questions to elicit an adequate history as well as listening to the patient's complaint to gather information pertinent to the present difficulty would eliminate many claims, particularly in an emergency room setting. It is well to remember that while an x-ray reading of "positive" is strong evidence of an abnormality, a negative result does not necessarily mean there are no abnormalities.

ANNUAL AWARDS DINNER
of the
ACADEMY OF MEDICINE OF NEW JERSEY

Wednesday, May 28, 1980
6:00 P.M.

at

THE CHANTICLER

Millburn, New Jersey

1980 AWARD RECIPIENTS

EDWARD J. ILL AWARD

JAMES S. TODD, M.D.

CITIZENS AWARD

THE HONORABLE RICHARD J. HUGHES

For further information, contact Executive Offices
of the AMNJ
609-896-1717

- provides effective symptomatic relief
- *b.i.d.* dosage simplifies therapy
- scored tablet for dosage flexibility

OPTIMINE®
azatadine maleate, 1 mg. tablets

CONTRAINDICATIONS Use in Newborn or Premature Infants: This drug should not be used in newborn or premature infants.

Use in Nursing Mothers: Because of the higher risk of antihistamines for infants generally and for newborns and prematures in particular, antihistamine therapy is contraindicated in nursing mothers.

Use in Lower Respiratory Disease: Antihistamines should NOT be used to treat lower respiratory tract symptoms including asthma

Antihistamines are also contraindicated in the following conditions: hypersensitivity to azatadine maleate and other antihistamines of similar chemical structure; monoamine oxidase inhibitor therapy (See DRUG INTERACTIONS Section).

WARNINGS Antihistamines should be used with considerable caution in patients with: narrow angle glaucoma; stenosing peptic ulcer, pyloroduodenal obstruction; symptomatic prostatic hypertrophy; bladder neck obstruction.

Use in Children: In infants and children especially, antihistamines in overdosage may cause hallucinations, convulsions, or death.

As in adults, antihistamines may diminish mental alertness in children. In the young child, particularly, they may produce excitation.

OPTIMINE TABLETS ARE NOT INTENDED FOR USE IN CHILDREN UNDER 12 YEARS OF AGE.

Use in Pregnancy Experience with this drug in pregnant women is inadequate to determine whether there exists a potential for harm to the developing fetus.

Use with CNS Depressants: Azatadine maleate has additive effects with alcohol and other CNS depressants (hypnotics, sedatives, tranquilizers, etc.).

Use in Activities Requiring Mental Alertness: Patients should be warned about engaging in activities requiring mental alertness, such as driving a car or operating appliances, machinery, etc.

Use in the Elderly (approximately 60 years or older): Antihistamines are more likely to cause dizziness, sedation, and hypotension in elderly patients.

PRECAUTIONS Azatadine maleate has an atropine-like action and, therefore, should be used with caution in patients with: a history of bronchial asthma; increased intraocular pressure; hyperthyroidism; cardiovascular disease; hypertension.

DRUG INTERACTIONS MAO inhibitors prolong and intensify the anticholinergic (drying) effects of antihistamines.

ADVERSE REACTIONS The most frequent adverse reactions are underlined:

General: Urticaria, drug rash, anaphylactic shock, photosensitivity, excessive perspiration, chills, dryness of mouth, nose, and throat.

Cardiovascular System: Hypotension, headache, palpitations, tachycardia, extrasystoles.

Hematologic System: Hemolytic anemia, thrombocytopenia, agranulocytosis.

Nervous System: Sedation, sleepiness, dizziness, disturbed coordination, fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesias, blurred vision, diplopia, vertigo, tinnitus, acute labyrinthitis, hysteria, neuritis, convulsions.

Gastrointestinal System: Epigastric distress, anorexia, nausea, vomiting, diarrhea, constipation.

Genitourinary System: Urinary frequency, difficult urination, urinary retention, early menses.

Respiratory System: Thickening of bronchial secretions, tightness of chest and wheezing, nasal stuffiness.

OVERDOSAGE Antihistamine overdosage reactions may vary from central nervous system depression to stimulation. Stimulation is particularly likely in children. Atropine-like signs and symptoms (dry mouth; fixed, dilated pupils; flushing; and gastrointestinal symptoms) may also occur.

If vomiting has not occurred spontaneously, the patient should be induced to vomit. This is best done by having him drink a glass of water or milk after which he should be made to gag. Precautions against aspiration must be taken, especially in infants and children.

If vomiting is unsuccessful, gastric lavage is indicated within three hours after ingestion and even later if large amounts of milk or cream were given beforehand. Isotonic and ½ isotonic saline is the lavage solution of choice.

Saline cathartics, such as milk of magnesia, draw water into the bowel by osmosis and therefore are valuable for their action in rapid dilution of bowel content.

Stimulants should not be used.

Vasopressors may be used to treat hypotension.

FEBRUARY 1977 11055010

For more complete details, consult package insert or Schering literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

Schering Corporation
Kenilworth, New Jersey 07033

SWW-417 I

THINK DRY

Schering



THINK
OPTIMINE®
azatadine maleate, 1 mg. tablets

FIRST
for relief of allergy symptoms

℞ only

Please see adjacent brief summary of prescribing information.

Copyright ©1980, Schering Corporation. All rights reserved.

How we made Bell System Yellow Pages advertising 21% more effective.

One reason for the success of your 1979 advertising program was our advertising program.

A study conducted in New Jersey by a major independent research organization showed that usage of the Bell System Yellow Pages increased 21% in 1979.*

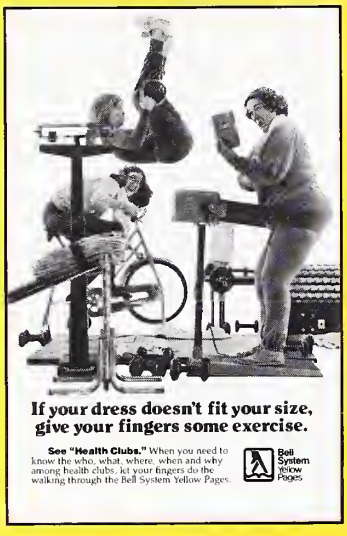
That means if you were a Bell System Yellow Pages advertiser, your ad program could have been 21% more effective than the previous year.

So what can you expect in 1980?

More of the same.

Because we'll be using, basically, the same ads in 1980.

"100% noted.
53% likelihood of remembrance.
56% unaided recall."**



"All four ads tested were high performers in terms of establishing top of mind awareness."**





"Nearly total understanding of at least one major message."**



"Main idea communication was immediate and powerful."**

They'll be running in major newspapers circulated throughout the state. Plus, for the first time, in five consumer magazines in New Jersey. Where the ads will be even more effective because they'll run in four-color.

Again in 1980, we'll be supplementing our print campaign with a statewide outdoor advertising campaign that ties in with something that everybody is worried about these days.

The gas crisis.

Now that you've heard about our ad program for 1980, what about your ad program?

*Peter Honig Associates, White Plains, New York.
**Telcom Research, Inc., Teaneck, New Jersey.

Bell System Yellow Pages

EDITORIALS

Anorexia Nervosa: A Spectrum

Like many disorders, anorexia nervosa displays a spectrum of severity from the mildest, undiagnosed form with spontaneous remission to a malignant, unremitting psychometabolic disorder which terminates in death from malnutrition. Although the epidemiological data, especially prevalence rates, etiology, pathophysiology, and possible genetic factors, are incomplete, Mintz, Wilson, (see articles this issue, p. 333 and p. 341) and others have shed some important light on the psychiatric aspects of the condition in terms of both the patient and the family.

As a resident, I had the frustrating professional experience of watching a teenaged female with anorexia nervosa starve to death on our medical ward despite the combined efforts of the psychiatrists and internists. In this instance, we learned that the precipitating factor was an ongoing, active incestuous relationship between the patient and her father. The family was of low social, economic, and educational status, and the patient was the eldest of five children, whose mother died just before the onset of anorexia nervosa in our patient. The father immediately informed his daughter that she had to assume the role of his dead wife, including sleeping with him in the same bed, participating regularly in sexual intercourse, and assuming the role of "mother" to her younger siblings. She died a miserable death, by which time her toothless, sixty-pound body resembled that of an eighty-year-old victim of a concentration camp.

A second patient—a sixteen-year-old diabetic—was recognized to have the stigmata of anorexia nervosa. She was weight-conscious, perfectionistic, studious (a "straight-A student") and obedient. She began to cut down on her food intake, exercised passionately (jogged daily, joined the track team at school, and so on), and lost weight from 104 pounds to 82 pounds (67 inches tall), while frequently experiencing hypoglycemic reactions. She was rigid, unwilling to eat more for fear she would gain weight ("bad for a diabetic") and regularly had confrontations with her overbearing, rigid, humorless and over-controlling mother. Her father was a passive, uninvolved, guilt-ridden man who later developed diabetes, as did a son. The young lady had amenorrhea and clinical cachexia despite an apparent abundance of energy.

This patient went into permanent(?) remission without the benefit of formal psychotherapy. She spent several summers at a camp for diabetic children, where she became an ideal camper, junior counselor, counselor, and later *dietary aid.* She then went to college and became a home economist, specializing in therapeutic dietetics. During this phase, her parents were divorced; at college she met and later married a sympathetic young man. The patient thus seemed to "solve" her psychiatric problems by manipulating the diets of patients—especially diabetic children—instead of her own. This displacement of her internal psychic conflict apparently did the trick and she made a socially acceptable adjustment.

Anorexia nervosa is a tough condition for the patient, the family, and the professionals. Primary physicians must be on the lookout for it and participate in the therapeutic adventure, along with the family counselors and psychiatrists once it is recognized.

A.K.

Insurance Coverage: A New Look

Senator Harrison A. Williams, in the March 1980 issue of this *Journal,* implied that we need National Health Insurance in place of Medicare, Medicaid and numerous other government programs, in order to provide for the unmet health care needs of certain citizens:

"In the inner cities and some rural areas in New Jersey, as many as ten percent of those in the hospital, and perhaps 50 percent of those requiring other kinds of necessary medical services have no insurance and few resources to pay for health care."[1]

In the April 1980 *Journal*, Congressman James Courter suggested that the tide has turned against "socialized medicine."[2]

What is the situation, in fact, and what does it mean? Is the unprotected segment of the United States population so large as to warrant the formation of a government-controlled system of health care financing to replace the existing confluence of public and private health insurance coverage?

According to a new study by Sudovar and Feinstein, in conjunction with an interdisciplinary advisory panel of recognized experts on national health insurance issues:

"Advances in health care technology and in the organization of the delivery system, and the dramatic growth of both private health insurance coverage and publicly financed health programs, have provided financial access to health care services for 94 percent of all Americans."[3]

One cannot make broad and sweeping statements on this subject without testing out the elements which constitute the

whole. After all, whether one says ten percent (as Williams does) or six percent (as Sudovar and Feinstein do), one still refers to some 15 to 20 million people in our nation. Aside from the raw numbers, however, one must take a look at the health services themselves.

The advisory panel defined the standard of adequate health expense protection in terms of the benefits and the protection. In their analysis, an adequate benefit package must include protection against the expense of the following services:

- inpatient hospital care
- physician services
- laboratory and x-ray services
- prenatal care
- inpatient psychiatric care
- outpatient services
- nursing home care.

"Protection" was defined as: (1) "at least 80 percent of the expense of covered services must be borne by the third-party entity, with the exception that patient cost sharing for inpatient psychiatric care may be required in excess of 20 percent of expenses," and (2) "at least $250,000 of catastrophic expense protection must be provided by the third-party entity and the sum total of patient cost sharing must not exceed 10 to 30 percent of income."[3]

According to the study, the existing health care system does pretty well in the areas of inpatient hospital care, inpatient psychiatric care, but falls down in physician visits (inpatient, office, and home) and nursing home care.

Less than two-thirds of the population have adequate catastrophic protection, while less than one-third has a maximum out-of-pocket limit to potential health expenditures. Even the existing Medicare program was not considered adequate unless it was complemented by private health insurance benefits.

Who are the unprotected or the underprotected among the population? Typically, they are employed full-time or part-time by a small firm, or are self-employed, or are unemployed, but not eligible for public assistance, and unable to afford to purchase adequate private insurance. Like the "unwashed," this would appear to be a group of citizens who always will be with us.

Some politicians have a standard approach to social problems: *throw money at it and hope it will go away.* However, now that the word is finally out—that the primary cause of our major economic problem, *inflation,* is *government spending, that* hardly seems like a sensible solution.

Among their conclusions, Sudovar, Feinstein and the panel state that "the current configuration of public and private coverages has provided extensive health expense protection to the majority of the population and offers a solid foundation upon which to build improvements in coverage within the framework of the existing health care delivery system." Other conclusions were: (1) changes in health care expenditure coverage should be limited to medically necessary services, (2) first dollar coverage for health care services should not be provided, but a 20 percent cost sharing for most services should exist as long as the latter does not endanger a family's economic resources, (3) there should be catastrophic expense protection with a limit in individual out-of-pocket expenditures for health care services, and (4) cost containment is important and providers should be accountable for the cost implications of their behavior."[3]

So, the overall answer to the questions seems quite clear: We do have a good system of health care provision and financing, but it can stand some improvements. That does not mean that this nation needs National Health Insurance with the enormous expenditures and bureaucracy it would entail. In these days of budget-cutting and expenditure-containment at the national level, that "bag of worms" (NHI) would be a giant step backwards.

We do need additions and modifications to the existing public-private system of financing health care to attack the problems of the unprotected or the underprotected, and to limit the danger of catastrophic losses. This should be done, according to the experts, in a climate of fiscal responsibility. Throwing money and developing bureaucracy is not the answer.

A.K.

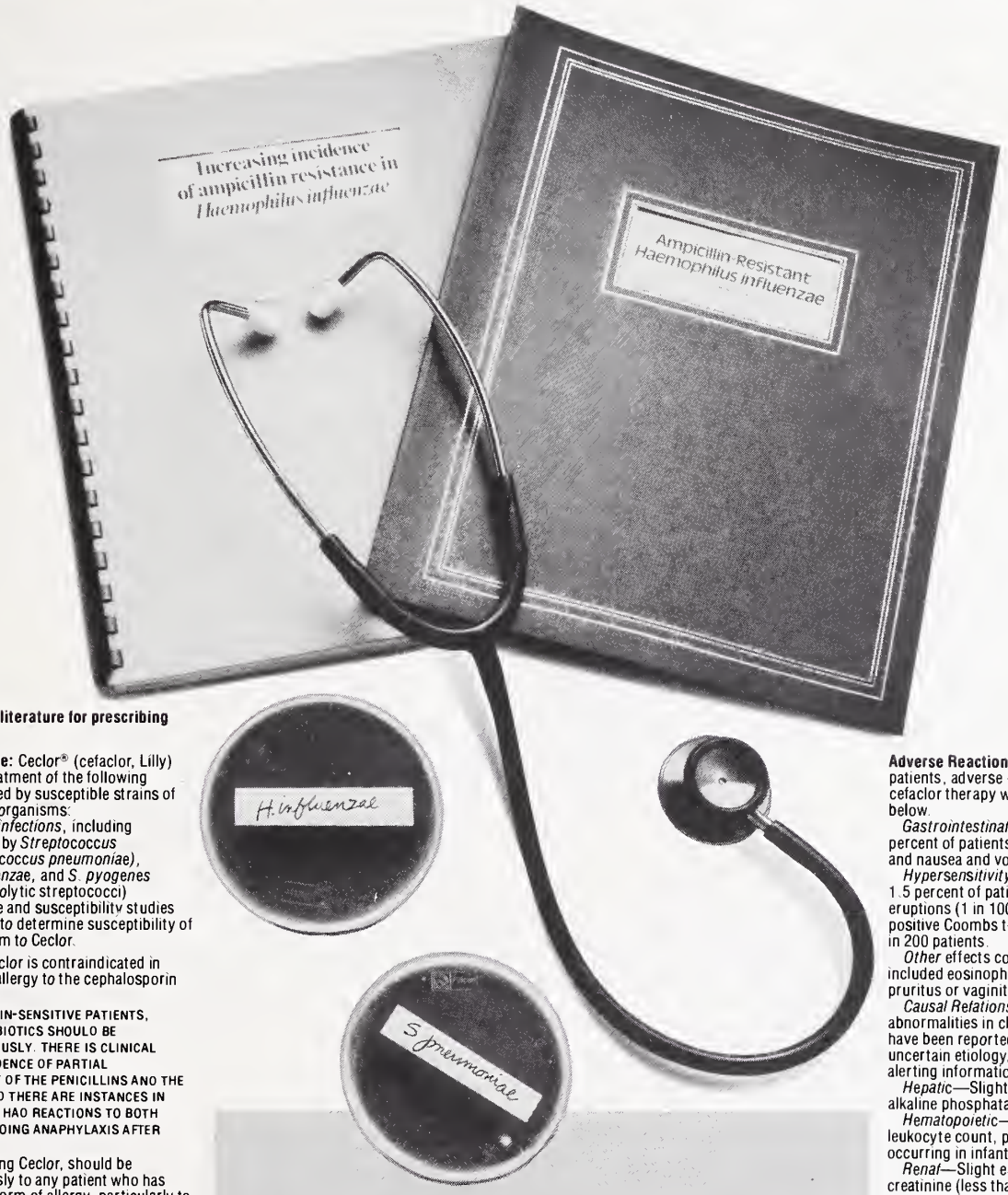
References

[1] Williams HA Jr: National health insurance. *J Med Soc NJ* 77:207-208, (March) 1980.

[2] Courter J: Has the tide turned against socialized medicine? *J Med Soc NJ* 77:291-293, (April) 1980.

[3] Sudovar SG, Feinstein PH: *National Health Insurance Issues.* Washington, DC, Roche Laboratories, 1979.

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

rief Summary.
onsult the package literature for prescribing formation.

dications and Usage: Ceclor® (cefaclor, Lilly) indicated in the treatment of the following fections when caused by susceptible strains of e designated microorganisms:
Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)
Appropriate culture and susceptibility studies ould be performed to determine susceptibility of e causative organism to Ceclor.

ontraindication: Ceclor is contraindicated in atients with known allergy to the cephalosporin roup of antibiotics.

arnings: IN PENICILLIN-SENSITIVE PATIENTS, EPHALOSPORIN ANTIBIOTICS SHOULD BE DMINISTERED CAUTIOUSLY. THERE IS CLINICAL ND LABORATORY EVIDENCE OF PARTIAL ROSS-ALLERGENICITY OF THE PENICILLINS AND THE EPHALOSPORINS, AND THERE ARE INSTANCES IN HICH PATIENTS HAVE HAD REACTIONS TO BOTH RUG CLASSES (INCLUDING ANAPHYLAXIS AFTER ARENTERAL USE).
Antibiotics, including Ceclor, should be dministered cautiously to any patient who has emonstrated some form of allergy, particularly to rugs.

recautions: If an allergic reaction to cefaclor ccurs, the drug should be discontinued, and, if ecessary, the patient should be treated with ppropriate agents, e.g., pressor amines, ntihistamines, or corticosteroids.
Prolonged use of cefaclor may result in the vergrowth of nonsusceptible organisms. Careful bservation of the patient is essential. If superinfection occurs during therapy, appropriate easures should be taken.
Positive direct Coombs tests have been reported uring treatment with the cephalosporin ntibiotics. In hematologic studies or in ansfusion cross-matching procedures when ntiglobulin tests are performed on the minor side in Coombs testing of newborns whose mothers ave received cephalosporin antibiotics before arturition, it should be recognized that a positive oombs test may be due to the drug.
Ceclor should be administered with caution in e presence of markedly impaired renal function. nder such a condition, careful clinical observation d laboratory studies should be made because fe dosage may be lower than that usually commended.
Usage in Pregnancy—Although no teratogenic or ntifertility effects were seen in reproduction udies in mice and rats receiving up to 12 times the aximum human dose or in ferrets given three nes the maximum human dose, the safety of this ug for use in human pregnancy has not been tablished. The benefits of the drug in pregnant omen should be weighed against a possible risk the fetus.
Usage in Infancy—Safety of this product for use infants less than one month of age has not been tablished.

Adverse Reactions: In clinical studies in 1493 patients, adverse effects considered related to cefaclor therapy were uncommon and are listed below.
Gastrointestinal symptoms occurred in about 2.5 percent of patients and included diarrhea (1 in 70) and nausea and vomiting (1 in 90).
Hypersensitivity reactions were reported in about 1.5 percent of patients and included morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occurred in less than 1 in 200 patients.
Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).
Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory tests results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.
Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).
Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).
Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [070379R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor® (cefaclor) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.
Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References
1. Antimicrob. Agents Chemother., *8*:91, 1975.
2. Antimicrob. Agents Chemother., *11*:470, 1977.
3. Antimicrob. Agents Chemother., *13*:584, 1978.
4. Antimicrob. Agents Chemother., *12*:490, 1977.
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II: 880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

Lilly

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

000482

Morris E. Chafetz, M.D.,
Founding Director of the National
Institute on Alcohol Abuse and Alcoholism,
is pleased to announce
the opening of a private
residential alcoholism treatment facility
in Charleston, South Carolina.



FENWICK
HALL

John H. Magill, Executive Director. Layton McCurdy, M.D., Medical Director
P.O. Box 688, Johns Island, South Carolina 29455. Phone 803-559-2461

Anorexia Nervosa: The Clinical Syndrome and Its Dynamic Implications*

IRA L. MINTZ, M.D., Englewood

With the increased prevalence of anorexia nervosa and its physical and psychological debilitating impact, a reevaluation of the anorexic syndrome is in order. The psychiatric and clinical picture is presented from the historical and current perspective. The dynamic issues are discussed, the family picture is provided, and some technical aspects of handling the patient are suggested.

The term "anorexia nervosa" was coined in a series of three papers by Gull, read before the English Medical Society beginning in 1868.[1]

The earliest description of the illness, however, is ascribed to a Genovese physician, Simone Porta O. Portio in 1500.[1] A clear and easily recognizable clinical syndrome was presented by Morton in 1689 in England.[1]

". . . Mr. Duke's Daughter in the year 1684 and in the eighteenth Year of her Age in the month of July, fell into a total suppression of her Monthly Courses from a multitude of Cares and Passions of her Mind . . . From which time her Appetite began to abate, and her Digestion to be bad; her flesh also began to be flacid and loose, and her looks pale. . . . She was wont by her studying at Night, and continual poring upon Books, to expose herself . . . to the injuries of the air. . . . Loathing all sorts of Medicaments, she wholly neglected the care of herself for two full years, till at last being brought to the last degree of a Marasmus, or Consumption, and thereupon subject to Frequent Fainting Fits, she apply'd herself to me for Advice.

"I do not remember that I did ever in all my Practice see one that was conversant with the Living, so much wasted with the greatest degree of a Consumption (like a skeleton only clad with skin); yet there was no Fever, but on the contrary a coldness of the whole body; no cough, or difficulty of breathing, . . . or of any other Entrail. . . . Only her appetite was diminished, and her Digestion uneasie, with Fainting Fits, which did frequently return upon her.

". . . Being quickly tired of Medicines, she beg'd that the whole Affair might be committed again to Nature, whereupon consuming everyday more and more, she was after three months taken with a Fainting Fit and dyed."[1]

Thoma[1] from whose book this description was taken gives Morton credit for his acuity in recognizing the amenorrhea, loss of appetite, weight loss, constipation, and indifference to her severe cachexia. Thoma also acknowledged Morton's recognizing the inappropriate preoccupation with studying which I think is also characteristic of the illness. Strikingly, Morton seemed to link the onset of the illness to a "multitude of Cares and Passions of her Mind." The self-destructiveness and the unwillingness to cooperate with treatment, both of which are so characteristic of the illness, also seemed to be present in the patient's indifference to her progressive deterioration, and in her refusal of medication, and medical care from the good doctor. Finally, this patient seemed to have convulsed repeatedly from potassium loss from her electrolyte imbalance. The clinical syndrome remains essentially unchanged from what was described by Morton almost

Read before the Section on Psychiatry, 213th annual meeting of the Medical Society of New Jersey, May 13, 1979, Atlantic City. Dr. Mintz is a supervising child psychoanalyst at the Columbia University Psychoanalytic Training Center, College of Physicians and Surgeons, New York City, and is attending psychiatrist at Hackensack Hospital. He may be addressed at 39 Park Place, Englewood, NJ 07631.

300 years ago.

Almost 200 years later, in 1873, Lasegue provided a more penetrating psychological view of the illness, and saw it as a type of hysteria.[2]

"A young girl, between 15 and 20 years of age, suffers from some emotion which she avows or conceals. . . . it relates to some real or imaginary marriage project, to a violence done to some sympathy, or to some . . . desire.

"At first she feels uneasy about food, vague sensations about fullness, suffering and gastralgia postprandium. . . . The patient thinks to herself that the best remedy . . . will be to diminish her food. . . . Gradually she reduces her food, furnishing pretexts, sometimes a headache . . . and sometimes in a fear of a recurrence of pain after eating. At the end of some weeks there is . . . a refusal of food that may be indefinitely prolonged. The disease is now declared, and so surely will it pursue its course that it becomes easy to prognosticate the future. Woe to the physician who, misunderstanding the peril, treats as a fancy without object or duration an obstinacy which he hopes to vanquish by medicines, friendly advice, or by the still more defective resource, intimidation. With hysterical subjects a first medical fault is never reparable. Ever on the watch for the judgments concerning themselves, especially such as are approved by the family, they never pardon; . . ."[2]

Lasegue, like Morton, gave evidence of considerable clinical acumen. He recognized the clinical syndrome and its course. He saw important elements of emotional conflict, of problems surrounding marriage, and growing up, of ambivalent desires. He noted the many excuses found for not eating, including the common postprandial abdominal pains. Of considerable interest was his awareness of some of the technical difficulties in treating these patients, and his remarks about what we would feel today is the crucial importance of the primitive hypercritical super ego. He warned against misunderstanding the nature and the severity of the disease, noting the obstinacy with which the patient holds on to the illness. He knew that treatment ranging from friendly advice to intimidation was of little help. Finally he described a primitive super ego whose critical faultfinding is applied both to the patient, and to other people with equal and appalling vehemence; ". . . they never pardon."[2]

A further analytic perspective was provided by Freud[3] in his letters to Fliess where he associated anorexia with melancholia, and again in 1905 made the same comment in the Dora case.[4]

Additional psychoanalytic data emerged in the forties with Eissler's paper[5] in which he noted the importance of the dependency relationship to the mother, and Sylvester's[6] paper on anorexia in a four-year-old girl, which emphasized the oral sadistic conflicts. Masserman[7] and Leonard[8] emphasized the anorexic's fear of growing up and of becoming a mature woman. Fenichel (1945) also commented upon the importance of the parent-child relationship.[9]

Sperling[10-12] in her treatment of severe feeding disorders in childhood, in the treatment of psychosomatic diseases, and in the treatment of anorexia emphasized the importance of the mother-child relationship in the origin, maintenance, and resolution of these difficulties. She stressed the need to treat the mother, and the need for the mother to recognize her ambivalent, and often rejecting attitudes toward the child. She felt that the "feelings frequently stemmed from unresolved ambivalent conflicts from the mother's own childhood which she had transferred to her child or from unconscious identification of the child with repressed and rejected aspects of the mother's own personality."[12]

Falstein described the conflict in anorexic boys who attempt to deal with female identifications by becoming thin.[13]

Crisp in a surprising statement mentions that the prognosis is best when the parental behavior toward the child is normal.[13] Under such circumstances, I doubt that anorexia could develop.

Bruch[15-18] Selvini,[19] Thoma,[1] Sours[20-24] and Sperling[12] have expanded and further described the nature of the defenses, identifications, object relations, drives, and essential conflicts.

THE SIGNS AND SYMPTOMS

Anorexia can be defined as a conscious refusal to eat with a self-starvation which can be so severe that it can result in death. It is a deliberate pursuit of thinness, tenaciously adhered to in spite of warnings of danger by the family and by physicians. It is most common in adolescent girls although it is also present in older women, and has become increasingly evident in adolescent boys. Recently I have treated a 40-year-old man with classical symptoms of anorexia.

The rationale given by the patient for the starvation is that the patient feels too fat and needs to be a little thinner. This attitude can be held even when the patient reaches the stage of severe malnutrition and emaciation. All attempts to confront the patient with the emaciation and critical medical condition are met with a bland denial and a vigorous pursuit of the starvation. Many patients cite previous periods of childhood obesity and teasing as reasons for initiating a diet. Others ostensibly respond to a family member's comment about their excess weight.

Interestingly these patients rarely complain and even deny feeling hungry, or of missing the foods that they previously had enjoyed. During the starvation they report being fearful of eating because they will put on too much weight and get fat. To be confronted with a starved emaciated skeleton who complains of a fear of eating and getting fat is an incongruity that is difficult to reconcile, unless one recognizes that the starvation in part covers up a strong unconscious impulse to eat excessively and to gorge, and it is this impulse that the patient unconsciously recognizes and is fearful of giving in to. At times these patients do lose control and do ingest tremendous quantities of food and can put on a great deal of weight.

In some patients the clinical syndrome is one of alternating bouts of starving and gorging. However, most typically there is a sustained period of starvation with weight loss and emaciation. Not infrequently during the period of starvation and emaciation, there can be momentary bouts of bulemia with the ingestion of tremendous amounts of food, followed by vomiting to get rid of it with no net weight gain. This behavior can enter a chronic phase which can persist for years. It may be characterized by acute exacerbations of starvation with emaciation, and electrolyte imbalance with convulsions, requiring hospitalization followed by remission and return to the community until the next exacerbation. At other times the original starvation and emaciation that is present for many months can be replaced by overeating, and a weight gain that results in obesity. While this patient now appears obese, and the physician is no longer concerned about starvation and its consequences, the underlying conflicts still may be present. The external picture has changed from too thin to too fat and a denial of the impulse to eat is

replaced by acceding to the impulse to eat, but the unconscious problems can remain unchanged.

Finally a fourth stage can exist in which starvation recedes and is replaced by a chronic sub-clinical anorexia but the anorexic psychological picture remains.

A shift has taken place in which the conflicts that produced the most flagrant symptoms of anorexia are now manifested in a different form—in terms of acting out behavior. Starving is replaced by a constant preoccupation with food and with manipulating the environment through the use of food. To a considerable degree this takes place during the acute and chronic stages of anorexia proper. These anorexic patients attempt to achieve some control over the environment by not eating, by threatening not to eat, by how, when and where they eat. Aside from the starvation, these and other character traits persist although the clinical picture of anorexia proper may be minimal.

The diet in anorexic patients shows qualitative and quantitative changes. Usually all fattening foods, which often were previously enjoyed, are now renounced, except during the bouts of bulemia when these foods are consumed in almost unbelievable quantities. One patient described consuming four tuna fish sandwiches, three oranges, a quart of ice cream, an entire chocolate cake, and a quart of diet soda prior to vomiting. Instead of the bread, cake, ice cream and regular meals, the patient now prefers lettuce, celery, carrots, lean steak, and diet cottage cheese and soda.

Eating habits also change. The patient tends to pick at the food, to eat a bite here and there, to spread the food about on the plate to give the appearance of its having been eaten, and ostentatiously to deal with the meal in a manner to evoke the greatest provocation, invariably under the watchful gaze of the frustrated and apprehensive parents.

In addition to the decreased caloric intake, the patient makes prodigious attempts to burn up calories and further decrease her weight. This may take the form of an endless series of exercises designed presumably to keep in shape but actually further to promote the state of emaciation. Running in place for thirty minutes is followed by 100 sit ups and 30 pushups and other calisthenics. Characteristically, hyperactive, energetic-appearing behavior contrasts with the patient's sick, cachectic appearance and serves to deny her helpless state.

Vomiting is frequent, particularly following gorging or after meals that the patient fears will put on weight. The vomiting is induced by putting a finger down the throat or, after considerable practice, it can be accomplished at will, and often in secret. One patient jammed her fingers down her throat with such violence that the dorsum of the hand was scarred with teeth marks.

The vomiting from one end is frequently augmented by diarrhea and diuresis from the other. Some patients take up to fifty laxatives at a time to control bowel movements and to interfere with food absorption. Complaints of constipation are used to justify the laxatives. Frequent complaints of abdominal pains provide the patient with further reason for not eating. Others use diuretics obtained on one pretense or another resulting in electrolyte imbalance with possible convulsions.

Patients will stay up late at night to prevent a decreased metabolic rate during sleep. One patient smoked because she felt that it facilitated her additional control over bowel movements.

Finally, most of these patients manifest amenorrhea which precedes the emaciation, does not result from the starvation and is primarily psychologically determined.

THE PSYCHIATRIC PICTURE

Even a superficial psychiatric evaluation provides an astonishing degree of conformity with the clinical syndrome. These patients are insecure, dependent, and immature. They are extremely attached to their parents; this attachment may be openly evident or masked by a pseudo-independence and hostility. The parents in turn equally reveal a remarkable degree of uniformity. They are rigid, controlling, demanding, infantilizing and very attached to their children. One or both parents are very much involved in their child's life. The involvement usually takes the form of intrusiveness and interference in her growing up and independence. At the same time the parents are concerned about the well-being of the child and consciously attempt to help with the child's recovery. A great deal of control is exercised by the parents over the life of the child. During most of the time the child passively accedes to this domination.

I was unable to discern as did Sours that in a group of less ill anorexic patients, the mothers permitted an increased degree of independence or separation, either during the early life developmental stages or later in life during the anorexic illness.[20] The control seemed to be powerful, overwhelming, and continuous with resulting feelings in the patient of being totally overwhelmed, helpless, and damaged in her sense of identity.

With the arrival of the anorexic syndrome, a subtle but intensely powerful defiance becomes increasingly evident in the patient's stubborn refusal to eat. The decision to starve is maintained in spite of very strong parental pressures and threats. A battle ensues over who is to eat what and when. What the child is not able to accomplish by open defiance and self-assertion in the other areas of her life, she achieves in this very circumscribed area of living. One patient in a moment of candor commented, "not eating is all I've got." I am in agreement with Sperling[12] who emphasizes the importance of the starving in the patient's intrapsychic equilibrium, and sees it as a main pathological defense against a total loss of control. Through the mechanism of illness the patient is able to be defiant, and assertive, without being fearful of direct parental disapproval and punishment. In essence the patient proclaims, "I do not eat because I am sick, not because I choose to be rebellious and to challenge your authority." And the need to be rebellious and defiant on the one hand, and yet not expose herself to the fears of parental attack, provides in part both the tenacious adherence to the illness, and the adherence to the endless preoccupation with food and weight.

Kramer[22] in her discussion of Sours' paper felt that there was an overemphasis on pathological mothering, and that the "domineering mother" concept was overused in general and in his conception of etiological factors in anorexia. While it is true that Mahler's[23-25] descriptions of the infant's early separation and individuation phases provides a new and vital perspective into the child's intra-psychic development and into its relationship with and upon the mother, one still cannot minimize the powerful and overwhelming effect of the parents upon these children. Listening to descriptions of parental behavior by the patient, by other siblings, and by the father, provides convincing and clear-cut evidence to support the thesis that the early domination and control exercised by the powerful mother played a major role in the evolving illness. The battle for control, if anything, is intensified during the course of treatment and the therapist has

more than adequate opportunity to view its vehemence, tenacity, and repercussive forces. In one mother, the increased assertiveness on the part of the patient, in spite of the mother's attempts to prevent it, almost resulted in the mother's decompensation. Sperling[12] also comments upon the unconscious parental conflicts that become intensified as the patient improves, with the mother beginning to starve. Over-determined and multi-determined factors in all psychic events, however, require that adequate consideration be given for genetic factors and the child's role in the entire complex constellation of events. These patients do not wish to deal with or to discuss the true problems that exist in their lives, but rather to speak continually about eating, dieting, and weight loss. Once the patient begins to recognize and is willing to accept that the preoccupation with eating and dieting in part covers up dealing with the very realistic problems in life, the anorexia may begin to abate. Indeed a decision by the patient to abandon the anorexia is frequently followed by considerable anxiety about how to deal with the realistic problems in life, that preoccupations with the anorexia had masked.

These patients acknowledge that very often their entire waking hours are involved with food and dieting and weight loss. They think about what foods to eat, and what foods not to eat. They develop an expertise in dietary knowledge and know the calories present in every portion of food. They are conversant with the amount of carbohydrate, fat, protein, minerals, vitamins and tracer elements. They think about their meals long in advance. Their illness facilitates their ability to dictate what food will be served at home, what restaurant the family visits, and on occasion, how often. The assertiveness that begins with the starving spreads into other areas of eating and dining. Just as these patients initially deny having any problems in their lives, so they also deny feelings of hunger or interest in eating the food they previously enjoyed. Sperling[12] points out that a preoccupation with eating patterns and food is frequently present in the early life history of these patients and in their families.

The patients frequently report that they have nothing to talk about, and there is nothing that troubles them. This results from their consciously withholding all their vital thoughts and feelings because they do not trust. In addition not eating tends to bind the patient's conflicts defensively. Once the patient begins to eat, she often reports feeling flooded by all kinds of upsetting ideas, which can be so strong that they frighten the patient into returning to her starvation. One patient after beginning to eat reported being so upset by the emerging ideas that he could not sleep. Another commented that she was "afraid of going crazy."

The involvement with weight is equally consuming. The slightest increase in weight can set off feelings of panic in some of these patients.

The majority of the more serious cases reveal disturbances in their body image. They will look at themselves in the mirror and see themselves as fat, when in truth they appear like concentration camp skeletons. Only during the period of recovery will they often acknowledge that they are still very thin, so that they indeed must have been quite emaciated earlier in the disease. This disturbance in the body image is often present in the parents. In a number of cases where the patient was quite recovered from the physical illness and had gained 20-25 pounds, the mother would shout, "You are still thin, like a skeleton. You are no better than before you started treatment." The mother had difficulty in seeing and in acknowledging the improvement. Some anorexic patients whose illness is less severe, do not suffer from body image distortion, and recognize and admit that they appear thin, and acknowledge being troubled by it. I do not agree with Bruch[16-17] that a disturbance in the body image is essential in order to establish the diagnosis of anorexia, since I have seen a number of patients who are less severely ill, who clearly recognize that they are too thin, and would like to be heavier. They are unable to gain weight easily in spite of their conscious wishes to do so because their characteristic means of coping with conflict (so typical of the anorexic) requires that they starve and behave in anorexic fashion.

The patient's persistent claim to being obese and to be suffering from the obesity almost has the ring to it of a phantom limb or bladder or other missing organ, where the patient continues to report perceptions from it after it is gone. In a similar fashion the patient feels fat long after the fatness is gone.

Perfectionism is an outstanding quality in these patients and is evidenced in their behavior toward food and schooling.

While it is true that the crucial problems that anorexics have are not related totally to food—that food and dieting are displacements from more vital conflicts, and symbolically represent other issues—this does not mean that the preoccupation with eating bears no relevance to major difficulties. While the parents may deny early forced feeding, this aspect of early life is not infrequent. Coercing the child to eat may be a part of some of these patients' early life experience, and the subsequent not eating in the anorexic stage reflects the regression to this earlier conflict.

Problems around passivity, dependency, and needs to be taken care of are frequent in these patients. The preoccupation with not eating can represent both the need for the dependency care achieved through the parental concern over the possible starvation, as well as the denial of it, through the actual not eating. The preoccupation with feeding is certainly linked to problems of nurturing.

What emerges most clearly in the majority of these patients, however, is the problem of control. They have grown up and developed most of their lives without feeling that they had an appropriate degree of control over the vital issues of their lives. When they find that they are repeatedly frustrated in dealing with important experiences, and cannot control what is happening, they displace their needs to control the external events to controlling their eating habits, their choice of food, and their weight. In essence they shift the inability to control the external object, to controlling the functions of their own body—just as the psychosomatic patient who feels that he cannot control external events, shifts the conflict and controls a part of his own body instead. The importance attached to controlling the external situation also becomes displaced to the eating, which, in part, accounts for the tenacious quality seen in the patients' need to control the eating. Every aspect of food choice, the actual methods of eating, and the weight loss are associatively linked to, and stand for aspects of external events that are out of control. When the patient cannot achieve what she wishes with her friends, with her family, with her hopes and aspirations, she does so with, and to her food. The patient controls her eating habits, and her choice of foods the way she would like to control her friends and her parents. A frustration in the external world often results in an exacerbation of starving or may even initiate the anorexic syndrome itself. An argument with the parent is frequently followed by an episode of starving or with a conscious impulse to

starve defiantly.

These patients perform with excellence in school, and work very hard to become the best student in the class or in the school. The need for achievement in school, to control the academic material, in part, is similar to the need to control the eating, and is striven for with the same intensity and drive. This may account for the inordinately large number of anorexic patients who are such high achievers scholastically. At the same time the need to do well in school can also represent an attempt at growth, independence, and mastery consonant with the adolescent phase of development. Perfectionistic performance in school can also represent a form of defiance for which the patient does not fear excessive punishment. The markedly driven patient who studies constantly and voices dissatisfaction with anything but perfect grades distresses the parents, who recognize the compulsion and helplessly attempt to persuade the patient to work a little less and to enjoy herself more. The more the parent encourages the child to ease up, the more perfectionistic the child acts. She constantly attempts to obtain complete mastery over the work, thus defying the parent, achieving control, and punishing herself by the fatiguing compulsion.

The persistent almost frantic quality attached to the studying is somewhat reminiscent of the attitude toward eating and toward exercising. In all three cases the similar behavior reveals the seeds of different aspects of the same conflict.

Exercising is required and perniciously carried out into the stages of emaciation where the presence of fatigue is typically denied. Here, too, the exercise achieves weight loss, the discharge of aggression through motor activity, a sadistic defiance of the parents, the avoidance of retaliation by the parents, the gratification of dependency needs through the worry and concern of the parents, and the self-punishment by exhaustion and dangerous weight loss.

Dependency problems and separation anxieties play a major role in these patients' lives. They are ambivalent about the defiance and the assertiveness and independence toward which they aspire. Their illness, which contains the seeds of their rebellion and subtle assertiveness, also permits them to be further fussed over, controlled and dominated in the name of their parents' concern for them. The patient may remain about the house more frequently, fighting with her mother about the food while using the argument as an opportunity to remain in her company and away from her friends. One patient commented plaintively that when she was anorexic, everybody fussed over her, paid attention to her, and tried to do things for her. She didn't have to say a thing. Now that she has gained weight, people don't do that anymore and she feels quite neglected. Loss of close friends, and threatened loss of parental affection can contribute to the crystallizing of the anorexia syndrome.

The presence of an inordinate amount of parental attention can be evident early in childhood; too many things are done for and to the child rather than encouraging her to learn to do things for herself and to achieve the gratification and confidence from the accomplishment. This results in the child feeling helpless and dependent; she is deprived of the experiences upon which self-esteem, separation, individuation, mastery, and elements of identity are developed. She remains in constant need of attention.

One anorexic patient reported that when she was a little girl, her sister was struck by a car and everyone catered to her. The patient remembered standing in the center of the street waiting to get hit by a car so that she could share in the attention. At the last minute she "chickened out." The realities of serious injury had overpowered her impulses to get attention by self-destructive behavior and by being ill. Later in life, at age eleven, she developed anorexia and was hospitalized.

In treatment at age seventeen, after alternating bouts of starving and gorging, she became obese. The self-destructive behavior and the need for attention persisted. As she became involved with a delinquent girl, she reflected that she became attracted to Jane because everyone paid attention to her because she was so daring.

Over-determination, and multidetermination of the symptoms of not eating and weight loss reveal considerable sexual preoccupation and conflict. These psychological difficulties almost invariably are accompanied by disturbances in menses or in amenorrhea. The amenorrhea may precede the weight loss and is not thought to result from malnutrition or the hormonal changes associated with starvation.

It generally is accepted that these girls suffer from great anxiety over the sexual changes that accompany adolescent growth and development and that conflicts which arise in early adolescence contribute to the frequency of the disease at this time. Starvation and weight loss result in the loss of these characteristic sexual changes that accompany adolescence: increased body curves, especially around the hips and legs and enlargement of the breasts. Starvation gives the patient the appearance of a younger child, a preadolescent, not yet having arrived at the stage of adolescent sexuality.

At a deeper unconscious level, the loss of bodily tissue can represent the manifestations of a conflict over psychosexual identity. Many of these girls have unconscious feelings of male preference and their ambivalence about it takes the form of the desire to lose body tissue which unconsciously represents the displaced penis.

One very emaciated patient would get very panicky any time that she felt that she was putting on the slightest amount of weight and would squeeze the muscle mass on her legs and arms wanting to get rid of it. She was especially distressed by the tissue present on the inner side of her thighs and would squeeze it, complaining that she "can't stand it hanging there between her legs and has to get rid of it." The same problem is symbolized and displaced from the genitals by the patient's concern about putting on weight and accumulating muscle tissue in other parts of her body.

Not eating can represent deeply repressed unconscious fantasies reactivated from childhood that pregnancy results from swallowing a seed (sperm) and not eating represents an attempt to avoid the pregnancy. These unconscious fantasies can be present even though the patient intellectually understands the scientific aspects of pregnancy.

The accompanying amenorrhea reflects a part of the same picture: the need to be pre-menstrual, that is, to be a little child not yet ready for sexuality. At the same time ambivalent feelings about the conflict take the form of fantasies of pregnancy with the amenorrhea representing the pregnant state and the slightest evidence of an abdominal protuberance symbolizing the early pregnancy. Thus the patient unconsciously flees from sexuality and pregnancy with the development of a childlike physical state and the reversion to premenstrual sexual function on the one hand and yet has wishes for the forbidden pregnancy on the other, with preoccupation with the abdominal bulge of fat and the amenorrhea. This unconscious preoccupation with pregnan-

cy provides some understanding about the panicky response that these patients have to the slightest evidence of a little pot belly that is present in their emaciated state and the accompanying zealous attempts to starve it away.

PRE-MORBID PERSONALITY

The developmental history of many of these children reveals a surprising degree of uniformity in the family environment, in the parents, and in the behavior of the children themselves. The powerful, over-controlling mother, and at times father, establish an early life experience for the infant, toddler, and child. Obedience, conformity, submission, and perfection are early and continuing requirements during the various stages of growth and development. And this is achieved. The children are described as quiet, accepting, healthy, happy and responsive. They never gave the parents any trouble. Eating difficulties were not remembered. Yet in one boy whose early life was described in those idyllic terms, the older brother vividly remembered the traumatic forced feeding, the vomiting, and the refeeding of the vomitus. Often the conflicts of the parents are such that they need to force the child into an overly submissive role, and yet not be aware of it at the time or later. The mother views the child as an extension of herself requiring the behavior and functioning that she feels is in consonance with her attitudes rather than recognizing the separateness and individuality of the child. Normal phases of separation and individuation, especially those aspects of negativism, aggression, and exploration suffered most interference. To use Sours' words the attachment to the mother "promotes fusion rather than nurturance."[20]

Oedipal and latency periods are described with a continued calmness and tranquility. Performance in nursery and grade school is encouraged and usually achieved. Separation anxieties stemming from parental vocations and the entry into nursery and grade school often are noted. Excessive clinging as a toddler is remembered.

As the child reaches adolescence, the organized relatively quiescent, obedient, responsive stage of latency is replaced by adolescent turmoil. Physical, psychological and sexual growth is accompanied by increased aggressive and sexual impulses as well as the defenses against them. The consistent, thoughtful, responsive child of latency is replaced by the rebellious, unruly, assertive and provocative adolescent. Sexual impulses, fantasies and behavior become overpowering and preoccupying and alternate with feelings of aceticism, mysticism and sexual abstinence. The need for increasing levels of distance, separation from the parents, and independence oscillates with impulses to be close, to be dependent, and to be cared for. These drives exist in all adolescents, but are handled in different ways.

The preanorexic child is unable to absorb easily the usual changes of adolescence. The external controls are too strict, too firm, and too punitive. At the same time the impulses for increased assertiveness, rebellion and aggressiveness impinge upon the child's ego controls. The child faces an increased conflict from the powerful aggressive and sexual drives reverberating against strict parental controls and its own strict super ego, with threats of rejection and punishment for assertiveness, and misbehavior. The result can take the form of a compromise: a regressive pull to the anorexic syndrome.

The anorexia channels the emergence of the independence, assertiveness, and aggression in the form of not eating, and yet does not incur the wrath of the parents because its subtle indirect defiance takes the form of an illness, rather than open rebellion. At the same time the increased independence, defiance and sexuality, which is frightening to the patient is muted through the illness. This provides the patient with the excuse for an unrecognized dependency gratification as the parents become increasingly concerned and solicitous of the patient because she is sick rather than defiant. The illness encourages an increased closeness and involvement with the family, albeit under the guise of arguing and disagreeing about eating, rather than the pursuit of increased independence and self-reliance through greater relationships with the peer group.

The guilt which the patient experiences for the unconscious feelings of aggression and sexuality is assuaged by a strict punishing conscience which dictates that the patient suffer from starvation, illness and the possibility of death, and from the deprivation of all the foods that she enjoys so heartily.

Finally, a regression occurs in which the unsevered infantile ties to the mother reemerge with an archaic, omnipotent ego which strives for the megalomanic control of food and the patient's body and, through it, control of the external world.

TREATMENT

I think the majority of these patients can be treated in the psychiatrist's office and do not require hospitalization. In the more severe cases it may be necessary for a period of a few weeks until the patient gets more involved in the treatment process. In the initial phase of treatment the patient needs to be seen frequently, three to fives times a week, until she develops some understanding as to the nature of her illness and is no longer in danger of suffering from the physical consequences of starvation. The analytic approach in the treatment is an attempt to get the patient to see how damaging her behavior is to herself, why she is doing it, and to help her find alternative methods of dealing with her problems. It is unwise to threaten or to coerce the patient to eat, since this behavior would reproduce the very conflict that the patient has with her parents and which contributed to the anorexia in the first place. I do work with the pediatrician or internist and tell the patient that he is in charge of her physical well-being and that he will make every attempt to see that she does not get so sick that she might die. The technique of psychotherapy with these patients is extremely complex and should be done by a psychiatrist who has experience in the treatment of anorexia nervosa. A further discussion of the problems in treatment and how they are handled is beyond the scope of this paper.

SUMMARY

This paper attempts to present a psychoanalytic point of view of anorexia nervosa. While the illness is becoming increasingly common, it has a long history and was accurately chronicled 300 years ago. Interestingly, its most flagrant symptomatology has changed little in that time. Morton's early case died and we still face a significant mortality rate.

A historical review of the literature is provided with a description of the predominating view of the major clinicians.

The clinical syndrome is described along with the underlying unconscious reasons for the behavior and for the patient's difficulty in getting well. The "need" for the illness is clarified and a suggestion is made for a rational treatment plan which emphasizes both an understanding of the illness and a method for encouraging the patient's interest in

renouncing the disease and attempting to get well.

Early developmental history demonstrates an inordinately close relationship between the developing child and the parents in which the parents unwittingly relate to the child in ways that encourage dependency and helplessness and interfere with self-reliance and independence. The overcontrolling parents contribute to the development of a passive, overly good, obedient child. With adolescence the emerging psychic turbulence characterized by increased aggressiveness, sexuality and independence destabilizes the previous equilibrium and produces striving for independence in the child, bringing her into conflict with her parents. The inability to confront the parents directly is reflected in an indirect defiance, taking the form of "an inability to eat," rather than more overt forms of rebellion which would produce in the patient's eyes a critical attack that the patient feels she could not withstand. The anorexia syndrome can be seen as a compromise in which the patient can defy through illness and not receive the rejection that more flagrant rebellion would cause.

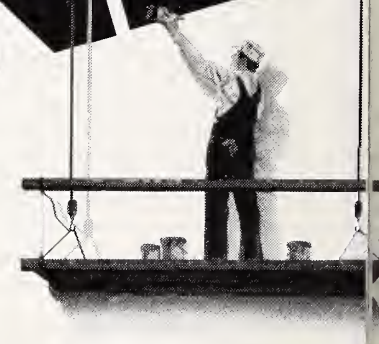
Sexual conflicts, separation anxieties, aggressive problems, difficulties in accepting the female role, pregnancy fears, and anxieties over motherhood are all additional major sources of conflict that are intertwined and acted out in the illness. Careful psychiatric treatment by an experienced clinician provides the best opportunity for the resolution of the anorexia itself and for the resolution of the underlying conflicts which otherwise could remain as major personality difficulties or become channeled into a different illness.

REFERENCES

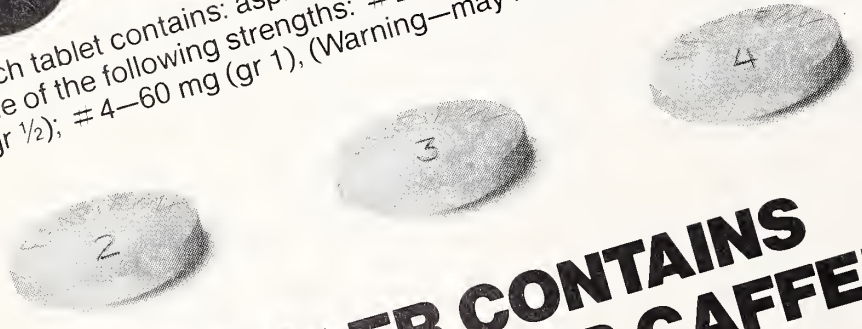
1. Thoma H: *Anorexia Nervosa.* New York, Internat'l Univ Press, 1967, pp 4-20.
2. Lasegue EC: On hysterical anorexia. In: *Evolution of Psychosomatic Concepts.* MR Kaufman and M Heiman, eds. New York, Internat'l Univ Press, 1964, pp 145-146.
3. Freud S: *The Origins of Psychoanalysis. Letters to Wilhelm Fliess, Drafts and Notes: 1887-1909.* London, Hagarth Press, 1954.
4. Freud S: Fragment of an analysis of a case hysteria. *Collected Works of Sigmund Freud,* standard edition. London, Hagarth Press, 1905.
5. Eissler KR: Some psychiatric aspects of anorexia nervosa demonstrated by a case report. *Psychoanal Rev* 30:121-145, 1943.
6. Sylvester E: Analysis of psychogenic anorexia and vomiting in a four-year-old child. *Psychoanalytic Study, Child 1,* vol. 1. New York, Internat'l Univ Press, 1945, pp 167-184.
7. Masserman JH: Psychodynamisms in anorexia noervosa and neurotic vomiting. *Psychoanal Quart* 10:211-242, 1941.
8. Leonard CE: An analysis of a case of functional vomiting and bulemia. *Psychoanal Rev* 31:1-18, 1944.
9. Fenichel O: *The Psychoanalytic Theory of Neurosis.* New York, Norton, 1945, p 88.
10. Sperling M: Neurotic sleep disturbances in children. *Nervous Child* 8:28-46, 1949.
11. Sperling M: The clinical effects of parental neurosis on the child. In: *Parenthood: Its Psychology and Psychopathology.* EJ Anthony and T Benedek, eds. Boston, Little, Brown, 1970, pp 539-569.
12. Sperling M: *Psychosomatic Disorders in Childhood.* London, Jason Aronson, 1978, pp 131-173.
13. Falstein EI, Feinstein SC, Judas I: Anorexia nervosa in the male child. *Am J Orthopsych* 26:751-772, 1956.
14. Crisp AH: Psychological aspects of breast feeding with particular reference to anorexia nervosa. *Br J Med Psychol* 42:119-132, 1969.
15. Bruch H: Anorexia nervosa and its differential diagnosis. *J Nerv & Ment Dis* 141:555-565, 1965.
16. Bruch H: Anorexia nervosa and its differential diagnosis. *J Nerv & Ment Dis* 150:51-70, 1970
17. Bruch H: *Eating Disorders: Obesity, Anorexia and the Person Within.* New York, Basic Books, 1973.
18. Bruch H: *The Golden Cage: The Enigma of Anorexia Nervosa.* Cambridge, Harvard University Press, 1978.
19. Selvini M: *L'Anoressia Mentale.* Milan, Felranelli, 1963.
20. Sours J: The anorexia nervosa syndrome. *Internat'l J Psychoanal* 55:567-576, 1974.
21. Sours J: The primary anorexia nervosa syndrome. In: *Basic Handbook of Child Psychiatry,* vol. II. J Noshpitz, ed. New York, Basic Books, 1979, pp 568-580.
22. Kramer S: Discussion of the paper by John A. Sours on "The anorexia nervosa syndrome." *Int J Pson* 55:577-579, 1974.
23. Mahler MS: *On Human Symbiosis and the Vicissitudes of Individuation.* New York, Internat'l Univ. Press, 1968.
24. Mahler MS, Pine F, Bergman A: The mother's reaction to her toddler's drive for individuation. In: *Parenthood: Its Psychology and Psychopathology.* EJ Anthony and T Benedek, eds. Boston, Little, Brown, 1970.
25. Mahler MS, Pine F, Bergman A: *The Psychological Birth of the Human Infant.* New York, Basic Books, 1975.

~~EMPIRIN®~~
~~COMPOUND~~
~~C CODEINE~~
IS NOW

EMPIRIN® C CODEINE



Each tablet contains: aspirin, 325 mg; plus codeine phosphate in one of the following strengths: #2—15 mg (gr ¼); #3—30 mg (gr ½); #4—60 mg (gr 1), (Warning—may be habit-forming)



NO LONGER CONTAINS PHENACETIN OR CAFFEINE.

ONE HUNDRED YEARS WELLCOME

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

The Family Psychological Profile of Anorexia Nervosa Patients *

C. PHILIP WILSON, M.D., New York**

Psychoanalytic research with the families of thirty anorexia nervosa patients revealed a parental psychological profile that appears to be etiologic in establishing in their children, in early years, a personality disorder which manifests itself later in the symptoms of anorexia nervosa. Therapeutic uses of this profile are discussed.

Psychoanalytic research with the families of thirty anorexia nervosa patients revealed a parental pyschological profile that appears to be etiologic in the establishment of a personality disorder in their children in their early years, which manifests itself later as anorexia nervosa. M. Sperling's analysis of anorectic children and their mothers laid the groundwork for this research which confirms and elaborates upon her finding that the predisposition to develop anorexia nervosa is established by a disturbance in the mother-child symbiosis in early years.[1] Four of the six features of the psychological profile correlate with parental attitudes and behavior described by Bruch in fifty cases[2,3] and by Minuchin in fifty-three cases.[4] The two features of the profile not described by these authors are usually only uncovered by psychoanalysis, a modality of treatment they did not utilize. Following are two typical families:

CLINICAL CASES

FAMILY ONE—The R.'s came for consultation about their 17-year-old daughter, Sally, who six months before went on a diet which she followed rigidly. She lost thirty pounds and became amenorrheic. A hyperactive, overly conscientious girl who got up at 5 a.m. to recheck homework that she had already prepared, Sally gave a history that is typical of anorexic adolescents. She always had been a "good" girl, obsessed with proper behavior, studying and social achievement. The father, a fifty-year-old business executive, grew up in Boston. Although financially successful, Mr. R. was very idealistic. He disapproved of the business world and always wished he could have become a physician. The care of his children was delegated to his wife. Mrs. R., a forty-five-year-old social worker, divided her time between a fulltime career and her family. She was very ladylike and overconcerned with manners and proper behavior for her daughter. When faced with emotional situations or fights, Mrs. R. frequently developed skin rashes and hives. She was very afraid of being fat and nagged her husband, who was a few pounds overweight, to join her in dieting.

Sally's brother Robert, two years her senior, was an easygoing adolescent boy who had a succession of girl friends, smoked, drank and enjoyed parties, dancing and rock music. Although the mother weakly argued with Robert

*The patients researched in this project were treated by members of the Psychosomatic Workshop of the Psychoanalytic Association of New York, Inc., which is comprised of fifteen child, adolescent, and adult psychoanalysts. I am particularly indebted to Doctors Otto Sperling, Ira Mintz, Cecilia Karol, Charles Hogan, Gerald Freiman, Anna Burton, Robert Gibson and Leonard Barkin for their contributions.

**Read before the Section on Psychiatry, 213th Annual Meeting of the Medical Socicty of New Jersey, May 13, 1979, Atlantic City. Dr. Wilson is a member of the faculties of the Columbia and New York University Psychoanalytic Institutes and attending psychiatrist and lecturer in psychosomatics, St. Luke's Hospital Center, New York City. He may be addressed at 1148 Fifth Avenue, New York, NY 10028.

and chided him for his poor school performance, most of her attention was focused on her daughter. She did everything she could for Sally, helping her with her studies, reviewing her homework, and barraging her with advice and criticism.

The R.'s followed a strict routine: meals were always on time, television was rationed to one hour a day and the major parental relaxation was intellectual discussion and reading of a serious nature. They never quarreled in front of their children and, in general, they shared the same ethical, social, and political views.

Memories of witnessing parental intercourse ("primal scene") emerged in Sally's analysis. At three years of age, when she woke up screaming with nightmares, her mother, to quiet her, had her sleep the rest of the night in the parental bed where Sally overheard the heavy breathing of intercourse which she fantasied was an attack by her father on her mother. Other witnessing of parental intercourse which increased Sally's fear of sexuality occurred at four and six years of age. There were no operable locks on the doors in the R.'s home. Parental nudity and toilet activities also were observed frequently by Sally who became inhibited and afraid of boys.

THERAPY OF SALLY AND PARENTS

As with all anorectics, many different conflicts were displaced onto and masked by Sally's anorexic symptoms. The focus of therapy was upon showing Sally the nature of her overly strict conscience which demanded perfect behavior in herself and others. In her treatment behavior she was hypercritical of me; memories and dreams revealed that she had developed this attitude by identifying with her mother's perfectionism.

Both Mr. and Mrs. R. were referred for psychotherapy. Mrs. R. came to understand that she was treating Sally very differently than Robert and that she had been pressuring her daughter to carry out certain of her own unfulfilled aspirations in life. The R.'s moderated their overconcern with dieting and weight loss and they learned how to tolerate and understand the emerging rebellious, critical, adolescent behavior that Sally manifested when her anorexic symptoms subsided. Mrs. R. interrupted her intrusive controlling attitude toward her daughter. The parents also took some vacations without their children for the first time and began to quarrel in front of their children. Operable bedroom and bathroom locks were installed and Sally was given a degree of privacy appropriate to her age.

FAMILY TWO—The parents of Alice came from an educated middle-class Italian Catholic background. The mother, Mrs. T. was a polite, conscientious housewife who was an excellent cook of almost gourmet caliber. A buxom woman who had been overweight before marriage, she was afraid of being fat and dieted. She clung to her daughter, telephoned her daily and showered her with gifts. She never criticized her and made no demands of her. Her husband, a very successful computer company executive, worked long hours and was frequently away from home. He doted on his wife who made most of the decisions for their children. Whereas Mrs. T. felt guilty about smoking cigarettes, Mr. T. neither smoked nor drank alcohol. He suffered from bouts of intestinal distress and "colitis" (not ulcerative colitis) which forced him to take time off from his busy schedule. He was always on a special diet. His one hobby was stamp collecting. The T.'s lived a restricted social life largely centered on their family. Although financially successful, they did not belong to any clubs or participate in athletics. Both parents controlled their emotions, never argued in front of their children and shared the same moral, social and political views.

Alice's analysis revealed many dreams and fantasies which had been caused by repeated witnessing of parental sexual relations. The parents always left their bedroom door ajar. In her early years, when the daughter awakened with nightmares, she went in to sleep with them. On weekend mornings, Alice would get up early to go downstairs, pausing to glance in at her parents who frequently were entwined with each other in post-coital sleep. When sexual dreams and fantasies about me emerged during therapy, this patient manifested behavior that reflected secret wishes to spy on and to surprise me. She would come very early or very late for sessions and would turn around while on the analytic couch to "catch me." She had no conscious memory of the birth of her two brothers, one when she was two and the other when she was six years old. Neither did she recall her mother being pregnant. Although outside the home she was very well behaved and a model child and student, she was very jealous of and hostile to her younger brothers. She sadistically picked fights with them. She had been given no information about sexual matters, pregnancy or birth by her inhibited hyper-moral parents. Alice's mother was modest and inhibited in dress and manner whereas Mr. R. never used a bathrobe and walked around the house in loose-fitting boxer shorts that revealed his genitals to his daughter. She frequently witnessed him urinating in the bathroom, the door of which was always open. This parental behavior provoked incestuous fantasies in Alice, the repression of which caused sexual inhibition and intense fears of boys. Her childlike attachment to her mother was a major analytic problem. Alice had trouble sleeping alone, left the light on and in the transference was afraid I would leave her, or that something would happen to me.

A crucial healthy turning point in treatment occurred when she gained enough self-confidence to move out of the parental home. The denial of aggression in the family was an important subject for analysis. The fact that the father had volunteered for the Air Force and had bombed the enemy in Korea was never mentioned in the home and was a source of anxiety, alarm and fear when it came up in treatment. All of Alice's boyfriends were passive and inhibited, which had been her conscious impression of her father, an attitude fostered by her mother who referred to her husband as a "sweet, kind gentleman."

THERAPY OF ALICE AND HER PARENTS

In her analysis, Alice was shown the nature of her strict conscience and that when she felt her behavior was not perfect she resorted to anorexic symptoms. Many conflicts which were displaced onto her symptoms were uncovered: fears of growing up, fears of menstruating and becoming pregnant, sexual fears such as having a voluptuous figure and exciting boys, and fears of loss of control of emotions, particularly of anger.

As a result of psychotherapy, Mrs. T. stopped infantilizing her daughter; the daily phone calls ceased. Mr. T. began to take time off from business and took his wife on vacations. The T.'s allowed themselves to express differences of opinion in front of their children. They eliminated their overconcern with her diet and even accepted their daughter's post-anorectic figure, which was voluptuous. The parents became normally modest in their personal behavior and doors began to be appropriately closed and/or locked.

THE PSYCHOLOGICAL PROFILE OF THE ANORECTIC FAMILY

Although the psychiatric diagnosis of patients with anorexia nervosa ranges from neurosis to psychosis, anorectic girls, while they dramatically exhibit conflict in their obsession with food and dieting, usually vehemently deny conflict. It is most often the unhappy parents who bring them for consultation. These parents are usually highly motivated, well-meaning people who will do everything they can for their sick child. It is healthy for a child to grow up in a home where rules and limits are set and where there is an example of parental impulse control, responsibility and ethical behavior. However, as this paper attempts to demonstrate, the parents of anorectic patients, because of their excessive conscientiousness, have been forced into an *overcontrol* of their child. The adolescent anorexic girl is in a situation of realistic and neurotic dependence upon her family so that changes in the parents' behavior and in their attitudes toward their daughter may be crucial for therapeutic success. Twenty years ago, when I analyzed my first anorectic patients, the parents often withdrew their daughters from treatment prematurely because they could not tolerate the rebelliousness and antisocial behavior that surfaced when the anorectic symptoms were resolved. Following Sperling's example, the parents were referred for therapy to enable them to accept emotional changes in their daughters.[1] In addition, the parents gained an understanding of certain pathological interactions they had with their daughters. The findings in every such family group were so characteristic that we could postulate a six-part psychological profile:

1. Parental overconcern with fears of being fat and dieting were apparent in every case. In both families the mothers dieted and were afraid of being fat. In Family Two the father was afraid of being fat and dieted because of his colitis.

My research[5,6,7] has confirmed Sperling's observations that specific conflicts and attitudes of the mother and/or father predispose a child for the development of psychosomatic symptoms as, for example, the mother's overconcern with bowel functions in ulcerative colitis.[1] It is the parental preoccupation with dieting and their fear of being fat which is transmitted to the daughter by the process of identification that is specifically etiologic in anorexia. The other features of the anorexic psychological profile are found also in the parents of patients suffering from such psychosomatic symptoms as asthma, migraine, and colitis.

The anorectic's pathological image of her body is caused by a terror of being fat and an obsession with being thin; both problems have many causes.[5] Important components are: (a) fears of being sexually attractive, (b) fears of loss of emotional control and (c) fears of becoming childlike and dependent. A secondary reinforcement of anorexia comes from other women in our culture most of whom have significant although less intense fears of being fat and overconcern with dieting. Various societal and cultural factors also reinforce the fear of being fat such as the medical dangers of obesity, increased athletics for women and the female fashion industry's emphasis on a slender figure. With the exception of men with overt or latent homosexual conflicts, males in our culture do not share the almost universal fear of being fat that we find in females.[5]

2. All these families showed perfectionism. The parents are overly conscientious people who emphasize good behavior and social conformity in their children. Usually they are successful people who also give time to civic, religious, and charitable activites. Many of them are physicians, educators, business executives, and religious leaders, i.e., "pillars of society."

Their conscientiousness is reflected in the exemplary childhood behavior and performance of the typical anorectic girl. Morality and togetherness characterized both Family One and Family Two. Divorce is rare in anorectic families. In the two out of thirty cases that were divorced the parents were conscientious, church-going people who lived near each other and continued to be caring, concerned parents. In one case, the mother's lover turned out to be the principal of the local school whom she thought to be morally superior to her husband. She considered her husband lazy because he wanted to retire from business to hunt and fish. In two other cases, the mothers were addicts, one to alcohol, and the other to morphine. However, these addictions expressed a rebellion against their hypermoral character structure.

3. Repression of emotions, caused by the overly conscientious morality of the parents, was found in every family group. As in Families One and Two, the parents kept strict control of their emotions. There were no quarrels or fights in front of the children. Inflexible parental morality results in various patterns of discipline for childhood misbehavior ranging from the threat of total loss of approval and love to explosive physical punishment such as slapping on the face. Childhood aggressive behavior is not permitted, while aggression in general is denied as in Family Two where the father's volunteer military service was looked down on. In most families, the father's assertive male behavior is laughed at and he is pictured, as Sperling pointed out, as "the spoiler" in the sexual relation, the mother being the superior moral figure.[1] The father also loses his authority because he is so conscientiously busy that he does not spend much time with his children.

4. The overconscientious perfectionism of the parents results in infantilizing, decision-making and overcontrol of the anorectic child. In Family One, for example, fun for fun's sake was not allowed, everything was for a noble purpose. The major parental home activity was intellectual discussion and scholarly reading. It was no surprise that the daughter hated the long hours of study she felt compelled to spend. It was a difficult problem in therapy for her to become independent and mature and to get rid of the humiliating feeling that she was a puppet whose strings were pulled by mother and father.

The last two features of the profile usually are uncovered only by psychoanalysis.

5. Exhibitionistic parental sexual and toilet behavior, the significance of which was completely denied, was found in each case. Doors in these homes are not locked and bedroom and toilet doors often are left open which facilitates the curious child's viewing of sexual relations and toilet functions. The child's witnessing of parental sexual intercourse is frequent. Such experiences coupled with parental hypermorality and prudishness causes an inhibition in normal psychosexual development in the anorectic girl. Both Sally and Alice were virginal, sexually repressed girls who were afraid of boys.

6. There is an emotional selection of one child by the parents for the development of anorexia and this child then is treated differently than other siblings. There may be (a) the carryover of an unresolved emotional conflict from the parents' own childhood—the infant may represent a hated parent or brother or sister; (b) there may be a need for control over the child so intense that the child is treated almost as if she were a part of the parent's own body; (c) a

particular psychological situation and emotional state of the parent at the time of the child's birth seriously may have damaged the parent-child relationship. For example, the child may be clung to (infantilized) because it is the last baby or it may be the center of too much attention and care from the mother because she recently has suffered a loss, such as the death of one of her parents. Thus, in Case One the anorectic child was expected to carry out the mother's unfulfilled life goals and in Case Two the child was clung to because of the mother's excessive dependency needs.

DISCUSSION OF RELEVANT RESEARCH

In 1970, Anthony and Benedek co-edited an important book, *Parenthood,* which offers a comprehensive overview of parent-child interactions. Particularly relevant to anorectic research are the chapters by Spitz on "The Effect of Personality Disturbances in the Mother on the Well Being of Her Infant" and by M. Sperling on "The Clinical Effects of Parental Neurosis on the Child."[8] In recent publications Bruch's observations of fifty anorectic families correlate closely with our profile.[2,3] She notes aspects of the overconscientious parents: that polite behavior is emphasized and non-expression of feelings is the rule. She noted the infrequency of divorce and the absence of parental arguing in front of children and she described the parents of anorectics as taking it for granted that they make plans and decisions and direct the child in every respect. Minuchin's findings in fifty-three anorectic families also substantiate our hypothesis.[4] He noted that anorectic families see themselves as loyal, protective, responsible and responsive; this correlates with our analytic finding of the families' strict perfectionist conscience. He noted that their pathological concern curtails normal growth and autonomy.[4] The meanings of his global term "enmeshment" are similar to the psychoanalytic developmental concepts such as unresolved symbiotic attachment to the parents and conflicts in separation-individuation.[9] Minuchin's treatment is aimed at altering the pathological parent-child interactions, but does not go on to the analysis of the personality disorder that underlies anorexia, which we have found to be necessary for lasting results in these patients.

METHOD OF TREATMENT

Our technique of therapy is to have the anorectic adolescent in intensive psychotherapy or analysis; if necessary the parents are in psychotherapy with colleagues. For the same therapist to treat the adolescent and the parents together creates a situation where the developing child will mistrust the therapist who becomes identified too closely with the judging parents. In some cases, the mother and/or father require intensive therapy in order to change their unhealthy relationship to their child. In many cases where the anorectic patient refuses or resists treatment, preliminary therapy of the parent can lead to a healthy treatment motivation in the anorectic adolescent. The technique of psychotherapy will differ from one case to another. In many cases modification of classical or traditional psychoanalytic treatment methods are used. In certain cases, even though the patient may be seen three or four times a week, the couch may not be used until late in therapy. It is also important that the parents be prepared for emotional changes such as suicidal behavior and "bitchy" rebelliousness which surfaces when the anorectic symptoms subside.

THE ROLE OF THE FAMILY PHYSICIAN IN THE THERAPY OF ANOREXIA NERVOSA

The family physician usually makes the diagnosis of anorexia nervosa and can play an important backup role in therapy. It is important that he emphasize to the parents and the anorectic patient the serious, possibly fatal nature of this disease, while advising psychodynamic treatment of the members of the anorectic family unit by psychiatrists. He should encourage the parents to consult with a psychiatrist for the sake of their sick child. If this recommendation is made with tact and firmness, a therapeutic program usually can be initiated. In the course of therapy, the family physician can fulfill an invaluable role in backing up treatment, quieting the parents' fears about their daughter's health by appropriate examinations, and by deciding in consultation with the psychiatrist when hospitalization is necessary if the anorectic patient induces a starvation crises.

SUMMARY

Psychoanalytic research with thirty anorectic families revealed a psychological profile that appears to have been etiologic in establishing in early childhood a personality disorder that manifested itself later in the symptoms of anorexia nervosa. Four of the components of this profile are (1) overconcern with dieting and fears of being fat, (2) overconscientious perfectionism, (3) repression of emotions, and, (4) infantilization of decision making for the anorectic child. They correlate with attitudes and behavior described by Hilde Bruch and Salvador Minuchin in their descriptions of over one hundred anorectic families. The last two features of the profile, (5) sexual and toilet exhibitionism whose significance is denied and (6) the unconscious selection of a child to develop anorexia because of parental conflicts, were uncovered by psychoanalysis in six of my cases. This paper shows how a psychodynamic understanding of this pathological psychological profile can be crucial for the treatment of anorexia nervosa.

REFERENCES

1. Sperling M: *Psychosomatic Disorders in Childhood.* New York, Aronson, 1978, pp. 129-173.

2. Bruch H: *The Golden Cage.* Cambridge, Mass., Harvard University Press, 1978, pp. 22-27.

3. Bruch H: *Eating Disorders: Obesity, Anorexia Nervosa, and the Person Within.* New York, Basic Books, 1973, pp. 216-217.

4. Minuchin S, *et al:* The anorectic family. In: *Psychosomatic Families: Anorexia Nervosa in Context.* Cambridge, Mass., Harvard University Press, 1978, pp. 51-73.

5. Wilson CP: The fear of being fat in the psychology of women and anorexia nervosa. *Bull Psychoanal Assoc NY* 17:8-9 (Feb) 1980. In press: *Intern Psychoanal Psychother,* Vol. 9. R Langs (Ed). New York, Aronson, 1980.

6. Wilson CP: On the limits of the effectiveness of psychoanalysis: Early ego and somatic disturbances. *J Am Psychoanal Assn* 19:555-558, 1971.

7. Wilson CP: Psychosomatic asthma and acting out. *Int J Psycho-Anal* 49:333, 1968.

8. Anthony EJ and Benedek T: *Parenthood, Its Psychology and Psychopathology.* London, England, Little, Brown and Company, 1970.

9. Mahler M: On human symbiosis and the vicissitudes of individuation. *J Am Psychoanalytic Assn* 15: 740-763, 1967.

A SEMINAR FOR DOCTORS BY U.S. TAX PLANNING CORPORATION
DISCUSSING LEGAL ALTERNATIVES TO I.R.S. 1040

The Bitter Pill To Swallow.



COMMON DOSAGE: 40%, 50%, 70%
OF YOUR EARNED INCOME

Description: Excessive tax payments in common dosage of 40%, 50%, even 70% of your income, reduce earnings and inhibit growth of personal wealth. A bitter pill to swallow.

Cause: Inequitable tax laws, complex reporting procedures, and intimidation by audit deter many high-percentage taxpayers from exercising their legal priviledges under current I.R.S. regulations.

Adverse Reactions: Findings include mild to severe depression, irritability and anxiety due to declining net worth and loss of income, resulting in hypersensitivity to sound financial planning.

Antidote: U.S. TAX PLANNING CORPORATION. A group of professionals dedicated to the task of assisting high-percentage taxpayers in keeping tax contributions to an absolute minimum.

Prescription: Attend the U.S.T.P.C. SEMINAR FOR DOCTORS on legal alternatives to crippling taxation. You will learn facts and tax procedures that can drastically improve the profitability of your private, group or corporate practice - and increase your net worth. Learn how to shield earnings from taxation and provide free tax dollars for capital appreciation. Discover the distinction between legal tax avoidance and tax evasion. See how you can defer, reduce or eliminate federal and state taxes - legally!

THIS SEMINAR DEALS WITH SPECIFIC DOLLAR-SAVING TECHNIQUES

Topics: These and more will be presented.
U.S. TAX LAWS • INFLATION • RECESSION • TRUSTS (FOREIGN AND DOMESTIC) • MALPRACTICE (SELF-INSURING) • LEVERAGED SHELTERS • LEASES •TAX-EXEMPT ORGANIZATIONS (501-3-C-CHURCH) • FOREIGN BANKING AND INVESTMENT • FUTURES • TAX PLANNING • OFF-SHORE TAX HAVENS • TRANSFER (INHERITANCE) LAW • INTERNATIONAL ESTATE PLANNING

WE GUARANTEE QUALITY AND CONTENT OF THIS SEMINAR • 100% REFUND

Faculty: MARVIN HELFRICH, J.D. Having earned a degree in Business Administration majoring in Economics and Accounting, and later a Doctorate in Law, Mr. Helfrich has an excellent background for understanding and implementing legal strategies in tax-planning. He is a practicing attorney specializing in tax problems of professional corporations.

JAMES G. BRYAN, Management Consultant and Founder of Doctors Management Consultants, Portland, Oregon, has served the medical/dental profession for many years. A teacher, lecturer, and economist, James Bryan earned his degree at the University of Oregon. He is a recognized authority on Off-Shore Tax Planning, Medical Malpractice Insurance and Tax Straddles.

CARL J. SAVIO, Financial Planning expert and President of Coordinated Professional Services, Philadelphia, Pa., specializes in International Estate Planning, Insurance Options and Tax Havens. An innovator, Savio combines his experience in International Tax Law, Accounting and Business Management to develop sound tax reduction plans for professionals and corporations.

Eligibility: Professionals, their spouse and/or office manager.

Seminar Fee: $95 for doctors (spouses/office managers free), includes continental breakfast. Fees are tax deductible.

Registration: In advance, by mail or phone. Confirmation by return mail upon receipt of check made payable to U.S. TAX PLANNING CORPORATION.

Cancellations: Full refund on cancellations received 48 hours prior to opening session.

Accomodations: If required, we will assist in reserving appropriate accomodations.

Mail To:
U.S. TAX PLANNING CORPORATION
Suite 2415 The Carlton House
Philadelphia, PA 19103 (215) 563-1939

☐ Sat., May 31, 1980 9 a.m. to 5 p.m.
Marriott Hotel Philadelphia, Phila., PA
☐ Sat., June 21, 1980 9 a.m. to 5 p.m.
Cherry Hill Hyatt House, Cherry Hill, NJ

Name: _____ No. attending: _____
Address: _____
_____ Zip: _____
Telephone: _____

For Reservations and/or Information call 1 800 543-3000, Operator 220

U.S. TAX PLANNING CORPORATION

When doctors, providers and patients participate *Everybody Wins!*

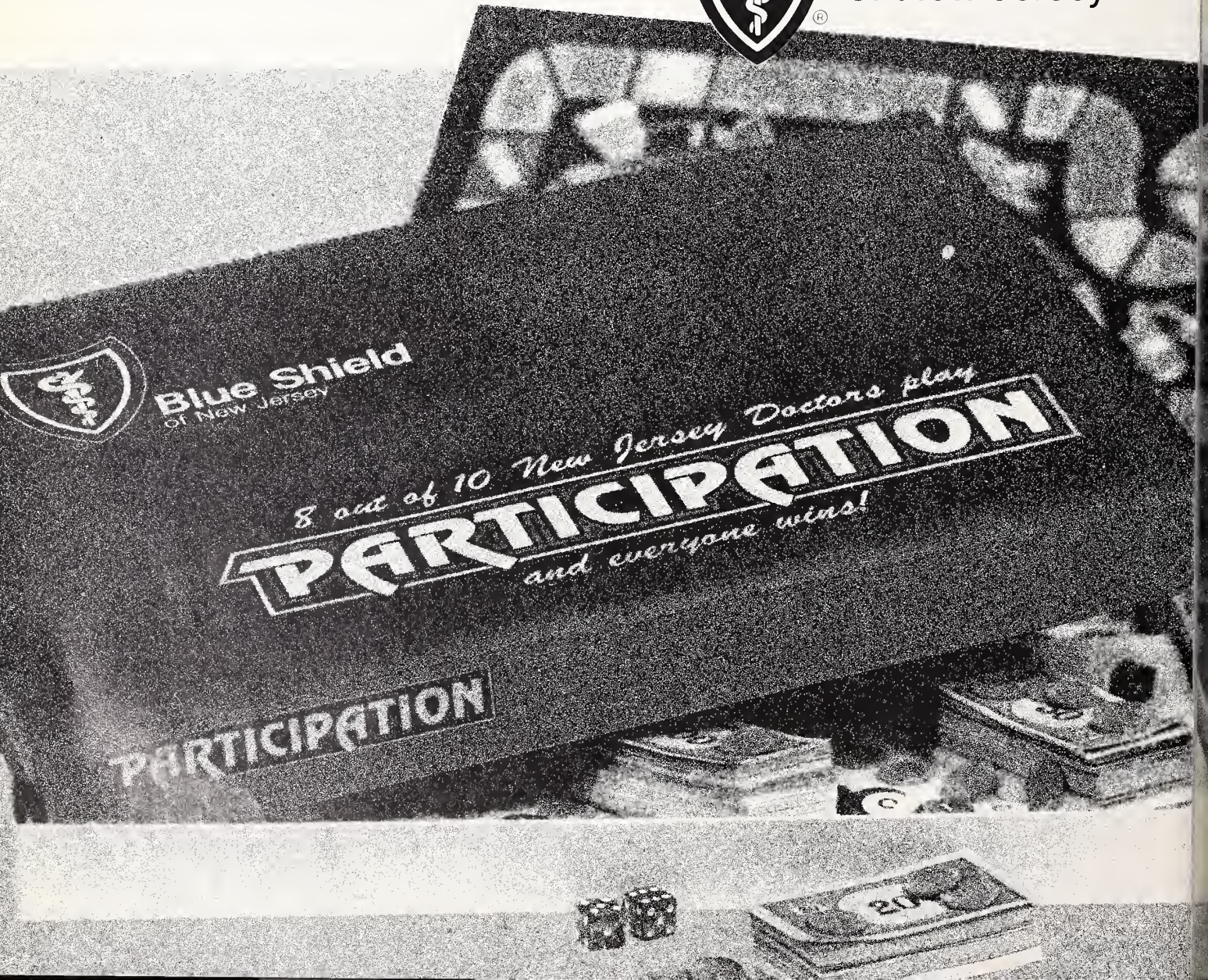
The battle to contain medical care costs without sacrificing the quality that we all agree is absolutely essential is one battle that deserves every physicians participation.

Almost 80% of all the physicians statewide (MD's, dentists, psychologists, osteopaths, podiatrists, physiotherapists and bio-analytical lab technicians) are participating Blue Shield physicians.

If you are currently not a participating physician it's probably been quite a while since your last talk with one of our professional relations representatives. We're eager to bring you up to date. Please call (201) 456-3250.

Give your patients the benefit of the best.

Blue Shield
of New Jersey



Legionnaires' Disease: A Two-Year Experience*

ALEXANDER ACKLEY, M.D., DAVID J. GOCKE, M.D.,
DAVID V. ALCID, M.D., and MELVIN P. WEINSTEIN, M.D., Piscataway

Thirteen cases of Legionnaires' Disease were diagnosed from March 1977 through December 1978. The presentation of the disease was remarkably characteristic, allowing presumptive therapy in several instances. One patient died, and three had unusual complications. The experience with this series of patients, and current recommendations for diagnosis and therapy are presented.

Legionnaires' Disease first became manifest at a convention of American Legionnaires at the Bellevue-Stratford Hotel in Philadelphia during July, 1976. The causative agent was subsequently identified as a gram-negative bacterium[1] for which the name "Legionella pneumophila" has been proposed.[2]

A New Jersey resident recognized as having the disease in the spring of 1977 has been reported previously.[3] Subsequently during 1977 and 1978 other cases of Legionnaires' Disease were diagnosed in New Jersey residents. Several of these patients were seen at the CMDNJ-Rutgers Medical School affiliated hospitals. This report summarizes the experience with these patients and current recommendations for diagnosis and therapy.

MATERIALS AND METHODS

The charts and x-rays of all patients diagnosed as having Legionnaires' Disease at the CMDNJ-Rutgers Medical School affiliated hospitals during 1977 and 1978 were reviewed. Diagnoses were established by indirect fluorescent antibody (IFA) titers of 1:128 or greater, with at least a four-fold titer change between acute and convalescent serum specimens tested simultaneously. One patient with a high titer of 1:512 is included as a presumptive case. The IFA determination was done at the New Jersey State Department of Health in ten cases and at the Center for Disease Control (CDC) in three cases. One patient was diagnosed by direct fluorescent antibody staining of an autopsy lung specimen at the CDC.

Epidemiologic data on these patients and information regarding other cases of Legionnaires' Disease diagnosed in New Jersey residents in 1977-1978 were reviewed in cooperation with the New Jersey Department of Health.

RESULTS

Of 36 patients diagnosed as Legionnaires' Disease in New Jersey from March 1977 through December 31, 1978, 13 occurred at the CMDNJ-Rutgers Medical School affiliated hospitals.[4] Patients #7 and #8 were associated with an epidemic which occurred out of the state. The remaining cases appear to be sporadic, without any particular exposure history.

All patients except #13 previously had been active and in good general health. The only underlying diseases of consequence noted were asymptomatic rheumatic heart disease (1), asymptomatic post-necrotic cirrhosis (1), possible pulmonary sarcoidosis (1), pulmonary fibrosis (1), arteriosclerotic heart disease (1), and alcoholism (2). Seven persons had a history of smoking. Only patient # 13 was on

*From the Department of Medicine, CMDNJ-Rutgers Medical School and affiliated hospitals. Epidemiologic and serologic data on the patients were supplied by the NJ State Department of Health (Dr. John Slade). Correspondence may be addressed to Alexander Ackley, M.D., Department of Medicine, Rutgers Medical School, P.O. Box 101, Piscataway, N.J. 08854.

"Of 36 patients diagnosed as Legionnaires' Disease in New Jersey from March 1977 through December 31, 1978, 13 occurred at the CMDNJ-Rutgers Medical School affiliated hospitals.[4]"

"Pneumonia was present on all admission chest x-rays and was variously a lobar consolidation, a patchy bronchopneumonia, or occasionally a more diffuse pneumonia."

immunosuppressive medication and his infection may have occurred prior to its administration.

The characteristics of each patient's illness are shown in Table 1. There was a remarkable similarity in the clinical presentation. The initial symptoms were two to four days of increasing malaise, diffuse myalgias and fever, often with shaking chills. Many patients complained of a moderate headache, and several noted watery diarrhea or vomiting. Characteristically, although cough was usually present, it was not a prominent complaint and was usually dry or minimally productive. Some patients had been noted by their family to be confused.

Physical examination showed high fever and occasionally a relative bradycardia. Patients were often toxic-appearing and tachypneic. Despite the paucity of cough, all patients had physical findings of pneumonia on admission. In some cases, only localized rales were present, but others had findings of consolidation.

Pneumonia was present on all admission chest x-rays and was variously a lobar consolidation, a patchy bronchopneumonia, or occasionally a more diffuse pneumonia. Multilobar involvement eventually occurred in five patients and pleural effusions developed in two.

The initial WBC ranged from 8,500 to 22,000 with a median of 13,400. All had a left shift. The erythrocyte sedimentation rate was uniformly elevated.

Expectorated sputum, when present, showed moderate polymorphonuclear cells and normal bacterial flora. Transtracheal aspiration was performed on five patients, either before antibiotics were started or after a few days of unsuccessful therapy with penicillin or ampicillin. These specimens showed a few-to-moderate number of PMN's and no bacteria on gram stain. They were sterile when plated on both routine media and on Mueller-Hinton agar supplemented with one percent Isovitalex® and one percent hemoglobin and held for ten days.

Mild elevations of liver function tests were recorded in half the patients. No significant renal abnormalities were observed. Three patients had hyponatremia (Na^+ <130 mEq) present on admission, and six had hypophosphatemia (PO_4 <2.4 mg/dl). Cold agglutinin determinations performed in a few patients were negative.

The patients were treated with a variety of antibiotics, but all received erythromycin. Patients #4 and #9 received it for only three days, but the others received erythromycin, two to four grams a day for ten days to four weeks. Typically, the diagnosis was not suspected at first, and other antibiotics were given. However, the experience with the initial case and the fairly characteristic presentation of subsequent cases alerted housestaff and consultants to the possibility of the diagnosis. Therefore, Legionnaires' Disease often was suspected on admission to the hospital or a few days thereafter and erythromycin started. It was usually administerd intravenously and most patients were eventually switched to oral therapy.

As noted in Table 1, several patients improved rapidly with institution of erythromycin, often after the disease had not improved or progressed on treatment with penicillin, ampicillin or cephalosporin. These patients noted subjective improvement and defervescence of fever in 24 to 72 hours. In a few instances, the course was more protracted, but 12 of the 13 patients survived. Patient #4 had a rapidly progressive pneumonia and died on the fifth day. She did not receive erythromycin until day three when her pneumonia was far advanced.

Abnormalities on chest x-ray lagged behind clinical recovery. Some x-rays showed residual scarring months after the illness. There has been no standardized followup in these patients, but no long-term sequelae were reported by their physicians.

CASE REPORTS

Three patients from Table 1 who had unusual complications are presented below. A presumptive case occurring in 1975, and not recorded in Table 1, also is included.

Case #4—A 43-year-old woman with a history of alcoholism was admitted to the hospital in June 1978 with a five-day history of myalgias, headache, a productive blood-tinged cough, and nausea and vomiting. On the day of admission, her family had noted that she was confused.

Physical examination revealed blood pressure 96/58, temperature 103.2°F, pulse 92, and a respiratory rate of 36. She was alert but very confused, disoriented, and uncooperative. She had findings of an RLL pneumonia, but otherwise examination was unremarkable.

Laboratory findings revealed WBC 13,500, 85 percent PMN's and 5 percent bands. Chest x-ray showed an RLL bronchopneumonia. A sputum specimen was nondiagnostic. Arterial blood gases were PO_2 50, PCO_2 30 on room air. Serum Na^+ = 129 mEq/L and serum phosphorus = 1.8 mg/dl (normal = 2.4 - 4.9). A lumbar puncture on day two revealed one PMN and two monocytes, but was otherwise normal. A drug screen was negative.

A presumptive diagnosis of pneumococcal pneumonia was made and treatment started with penicillin 1.2 MU/day intramuscularly (IM). This was increased to 8 MU/day intravenously (IV) the next day because of the consideration of aspiration pneumonia. However, the pneumonia progressed rapidly to involve all five lobes, requiring intubation and placement on a respirator, with 100 percent oxygen and positive end expiratory pressure to maintain oxygenation. Smear of a transtracheal specimen showed a few PMN's, no bacteria; culture was sterile. Gentamicin and erythromycin 1.5 gm/day IV were added for the next three days. However, the patient developed refractory hypoxia, hypotension, gastrointestinal bleeding, and oozing from skin

Table 1

Clinical and Diagnostic Feotures

Patient	Age/Sex	Date	Clinicol Presentation	Seralogy Acute	Seralogy Conv.	Treatment	Outcome and Comments
1*	57/M	March 1977	Fever 105$^{6°}$, HA, chills, myalgios, RLL pneumonia	<1:32	1:512	Pen G Erythromycin	Survived. No response to ta penicillin; prompt respanse to IV erythromycin
2	50/M	May 1977	Fever 104$^{6°}$, dry cough myolgias; LLL pneumania	<1:32	1:512	Pen G Erythramycin	Survived. No respanse to penicillin G; prompt respanse to IV erythromycin
3	63/M	July 1977	Fever, chills, myalgias, caugh, RLL pneumonia	<1:32	1:512	Pen G Erythromycin Gentamicin Kanamicin	Survived. Progressive multilobar pneumonia; ARF; Proteus mirabilis superinfection; residuol scarring an chest X-ray
4	43/F	June 1978	Fever, myolgias, chills vamiting, HA, cough, canfusian, RLL pneumonia	Diagnosed by direct fluorescence of outapsy lung specimen		Pen G Gentamicin Erythramycin (3 days)	Died with multilabar pneumonia, DIC (See Case Repart)
5	20/M	August 1978	Fever 104°, vomiting, abdominal pain, jaundice, RLL pneumanio	1:2048 1:4096 1:1024	9/4/78 10/3/78 5/29/79	Pen G Erythromycin	Survived. No response to penicillin G; prompt response ta erythromycin; hemolytic anemio (See Case Report)
6	49/M	Sept. 1978	Fever 104°, HA, caugh, diorrheo, LLL pneumanio	1:64	1:1024	Erythramycin	Survived. Prompt response to erythromycin
7	58/M	August 1978	Fever 105$^{4°}$, HA, diorrhea, cough, dyspnea, diffuse bilateral pneumania	<1:32	>1:1024	Ampicillin (before odm.) Erythramycin Cephalosporin Gentomicin (steroids)	Survived. GI hemorrhoge, Become ill ot o convention in Texas
8	56/M	August 1978	Fever 104°, vamiting, HA, cough, RLL pneumonio	1:128	1:512	Oral Penicillin (before odm.) Erythramycin Cepholosparin Gentamicin	Survived. Hod a progressive biloteral pneumanio. Become ill o few doys ofter returning from same convention in Texos
9	58/F	Oct. 1978	Fever 103°, chills, vomiting, LUL pneumanio	1:64	>1:1024	Pen G Ampicillin Erythromycin (3 days) Gentamicin	Survived. Uneventful recavery
10	69/F	Oct. 1978	Fever 104°, chills, myalgias, cough, LLL pneumonio	1:64	>1:1024	Ampicillin Erythromycin	Survived. No improvement on ompicillin; prompt response ta erythromycin
11	79/F	Oct. 1978	Fever 104$^{4°}$, HA, cough, confusion, RUL, RML pneumonio	1:256	1:512	Cephalosporin (before adm.) Erythromycin	Survived. Prompt response ta erythromycin
12	53/M	Dec. 1978	Fever 104°, chills, caugh, confusion, RLL, RML, RUL pneumonio	<1:64	>1:1024	Ampicillin (before adm.) Erythramycin	Survived. Neurologic camplications (See Case Report)
13	59/M	June-Sept. 1978	Pt with pulmonary fibrasis; 1st titer was in June during protrocted febrile illness w/cough, ↑WBC; 2nd titer in Sept. -- at that time, no conclusive evidence of infectian	June 1:32	Sept. 1:2048	Pen G Tetrocycline and Cepholosparin in June Erythramycin in Sept.	Survived. Infection may have accurred either ot time of febrile illness in June, ar subsequently during the summer while on prednisane far underlying lung disease

* previausly reported Ref. 3

HA = Headache; ARF = Acute Respiratary Foilure; DIC = Disseminated Intravascular Caogulatian; WBC = White Blood Count; Pen G = Penicillin G

puncture sites. Coagulation studies which had been normal on admission now showed platelets 23,000, PT 21 seconds, and PTT > 100 seconds, fibrinogen 66 mg percent (normal = 190-400), and the presence of fibrin split products. She died on the fifth hospital day.

Autopsy revealed a diffuse bilateral pneumonia with an intra-alveolar fibrinous exudate containing principally histiocytic cells and lesser numbers of neutrophils. No pathogen could be demonstrated by routine techniques. However, Legionnaires' Disease bacillus was demonstrated by direct fluorescence in lung sections sent to the Center for Disease Control. In addition, disseminated intravascular thrombi were observed in the brain, liver sinusoids, and kidney glomeruli.

Comments: This patient died of a rapidly progressive multilobar pneumonia, and the histologic changes observed in the lungs at autopsy were typical of those observed in Legionnaires' Disease. Although she did receive erythromycin, it was not begun until the third day when her pneumonia was far advanced. Her course was further complicated by bleeding associated with disseminated intravascular coagulation.

Case #5—A 20-year old man was admitted on August 30, 1978 for nausea, vomiting, and abdominal pain of three days' duration. He had felt feverish and noted one chill. He had no cough. He had not traveled out of the state and his past medical history was unremarkable. He had no history of pneumonias, jaundice, or liver disease.

Physical examination revealed temperature 103°F, and pulse 110. He had icteric sclerae and signs of consolidation in the RLL. The laboratory report showed Hgb 15.7 with normal indices, WBC 22,000 with left shift, bilirubin 6.2, indirect 5.2. Liver function tests were normal. Chest x-ray revealed a RLL infiltrate.

He was treated with procaine penicillin 1.2 MU/day for a presumptive diagnosis of pneumococcal pneumonia. However, a fever of 103-104°F continued; he developed a nonproductive cough and complained of dyspnea. His chest x-ray showed further consolidation in the RLL with pleural fluid, and arterial blood gases showed PO_2 65, PCO_2 28 on room air. A transtracheal aspirate specimen showed PMN's but no organisms on gram stain and was sterile on culture. A thoracentesis yielded an exudate which was sterile on culture.

On the third day he was switched to oral erythromycin and two days later to erythromycin intravenously. Within two days of starting erythromycin he was afebrile. He was discharged from the hospital on the 14th day, feeling well, although his chest x-ray had residual changes.

His icterus and high indirect bilirubin on admission prompted investigation. An ultrasound of the gall bladder was negative. His hemoglobin fell from 15.7 to 10.0 in the first week. As he recovered, he showed rising reticulocytosis which was 8 percent with hemoglobin 10.9 at discharge on day 14; three weeks later his hemoglobin had returned to 14.9 with a normal bilirubin of 0.5 mg/dl. Studies of haptoglobin, G6PD, Coombs direct/indirect tests and hemoglobin electrophoresis in the hospital were non-diagnostic. However, a repeat G6PD determination in the clinic showed a gross deficiency.

His titers for Legionnaires' Disease, as shown in Table 1, were high during his hospitalization and subsequently showed a four-fold decrease.

Comments: This young man with fever, icterus, abdominal pain and vomiting (without cough) was initially thought to have cholecystitis. However, examination and chest x-ray disclosed RLL pneumonia and subsequent investigations excluded gallbladder or liver disease. Clinically he showed a rapid response to erythromycin therapy. The etiology of his icterus was consistent with an acute hemolytic episode secondary to infection in a patient with G6PD deficiency.

Case #12: A 53-year old man was admitted in December 1978. During the previous week, he had noted the insidious onset of malaise, fever with rigors, and a dry cough. Oral ampicillin for several days had no effect on his symptoms. His family noted that he was confused for two days prior to admission. He previously had been in good health. He had smoked one pack of cigarettes a day for years, but rarely used alcohol.

Examination revealed temperature 104°F, pulse 110, and respirations 20. He had an occasional dry cough and signs of RLL consolidation. He was confused as to the date and circumstances of his illness, but he had no localized neurological findings. Laboratory studies included hemoglobin 13.4 gm, WBC 11,500 (48 percent PMN's, 49 percent stabs, 3 percent lymphs). Chest x-ray showed a diffuse fluffy infiltrate with radioluscent areas in most of the right lung. Induced sputum was non-diagnostic. A transtracheal aspirate revealed a few PMN's, no bacteria on gram stain, and was subsequently sterile on routine cultures as well as at ten days on Mueller-Hinton agar supplemented with one percent Isovitalex and one percent hemoglobin. Other abnormal data on admission were serum phosphorus 1.9 mg/dl (normal = 2.4-4.9 mg/dl), and mild liver function test abnormalities. Lumbar puncture yielded normal spinal fluid.

Legionnaires' Disease was suspected and treatment begun on the first day with erythromycin 3 gm/day IV. On the ninth day he developed a rash. Erythromycin was continued at a dose of 2 mg/day IV, then p.o., and the rash resolved in one week. His temperature became normal on the third hospital day and his chest x-ray improved. During the first week he was alert and conversant, but remained confused; he had visual hallucinations, and his wife observed brief seizures on two occasions. His mental status slowly improved and he was discharged on the 26th day. For several weeks at home he continued to have a memory deficit, slight ataxia, thick speech, and trouble with fine motor movements such as handwriting. A chest x-ray showed some volume loss on the right side but he did not note dyspnea on routine activities. At four months he considered his recovery complete except for total amnesia for the first week of his illness, and he returned to work as a school principal.

His titer for Legionnaires' Disease at the New Jersey State Department of Health rose from <1:32 on admission to 1:1024 two weeks later.

Comments: This man had an extensive pneumonia which progressively cleared without incident, but he had marked neurologic manifestations including visual hallucinations, seizure activity, and a residual neurologic deficit which persisted three months beyond recovery from his pneumonia. He illustrates the degree to which neurologic manifestations may be present in this type of pneumonia. His erythromycin therapy was complicated by a rash, but it resolved while continuing the medication.

Presumptive Case in 1975—A 24-year old graduate student was seen in August 1975 complaining of two days of fever, nausea, vomiting, cough and dyspnea. He previously had been in good health. His temperature was 104°F, respiratory rate 26, and on examination scattered rales were heard in the right chest. His WBC was 13,200 with 75 percent PMN's, 18 percent lymphocytes, 2 percent basophils, and 2 percent

monocytes. Chest x-ray showed extensive bilateral infiltrates. Cold agglutinins were negative.

Hospital admission was advised but the patient refused. He was treated with tetracycline 500 mg qid. He progressively improved, although he was dyspneic for several days. By the seventh day he complained only of dyspnea on exertion, and his lungs sounded clear. Tetracycline was stopped. Chest x-ray three weeks after onset was completely normal, and the man has been well since then.

In October 1978, three years later, his physician recalled his case and sent serum to the New Jersey State Department of Health where his Legionnaires' Disease antibody titer was 1:128.

Comments: This patient's titer is consistent with Legionnaires' Disease infection at an indeterminate time in the past. The characteristics of his illness and its occurrence at the peak time of year for the disease make it likely, in retrospect, that he had Legionnaires' Disease in 1975.

DISCUSSION

The clinical experience with the 13 patients at the CMDNJ-Rutgers Medical School hospitals is similar to that described in other epidemics and sporadic cases. All patients had "Philadelphia-type" disease with high fever, constitutional symptoms, and moderate-to-severe pneumonias. Although cough with or without sputum occurred in most patients, it was not a prominent finding even when present. Headache, gastrointestinal complaints, and confusion were present on admission in several instances. Laboratory results were typical of previous reports, including the finding of hyponatremia or hypophosphatemia (or both) on the initial chemistry determinations in several cases. Several patients showed a dramatic improvement within 24 to 48 hours of starting erythromycin therapy.

One of 13 patients died. The slightly lower mortality rate in this series compared to other series may reflect chance alone, the low incidence of underlying disease in these patients, or the fact that all patients received erythromycin which has been associated with a more favorable outcome than treatment with other antibiotics.[5] It is of interest that the patient who died and Patient #3, who was the only other one with progressive respiratory failure requiring several days on mechanical ventilation, were the two patients known to be alcoholic. Over half of the patients smoked cigarettes regularly. Cigarette smoking may well be a predisposing factor in both epidemic and sporadic cases of Legionnaires' Disease.[6]

The complications of a severe encephalopathy with a persisting neurologic deficit in Case #12, and disseminated intravascular coagulation in Case #4, are unusual in Legionnaires' Disease but have been reported previously.[7,8] Acute hemolytic anemia has not been observed previously in Legionnaires' Disease although acute hemolysis has been associated with numerous other infectious diseases[9]. A variety of infections has been associated with G6PD deficiency.[10] It appears that Legionnaires' Disease can be added to this list.

The recognition of a patient who probably had Legionnaires' Disease in 1975 is not surprising. Several epidemics and occasional sporadic cases elsewhere in the United States have been diagnosed retrospectively as far back as 1947[11]. In addition, two sporadic cases of Legionnaires' Disease in persons residing in New Jersey who worked in or near Philadelphia occurred in the summer of 1976 prior to the Philadelphia Legionnaires' Convention.[12] As might have been expected, Legionnaires' Disease appears to have been present in New Jersey, as elsewhere, prior to its eventual recognition.

In November 1978, the Center for Disease Control in Atlanta, Georgia, sponsored an International Symposium on Legionnaires' Disease. Proceedings of that symposium have recently been published.[13] It reviews the microbiology and pathophysiology of Legionnaires' Disease and its ecology and epidemiology so far as is known. It also includes an excellent review of the clinical aspects of the disease,[6] and it should serve as a useful reference in suspected cases.

Legionnaires' Disease should be suspected in any patient presenting with pneumonia in whom no bacterial pathogen is demonstrated by gram stain and culture of adequate sputum specimens. It thus joins the list of causes of "atypical pneumonia" including mycoplasma pneumonia, psittacosis, influenza, adenovirus, Q fever, tularemia, and plague.

Epidemiologic clues may be helpful. The disease occurs most often in middle-aged or older persons, although it can occur in the young as in Case #5. It has been infrequently diagnosed in children. Summer and early autumn are the peak seasons for the disease although sporadic cases also occur in other months. Attendance at a convention or other travel in the previous two weeks should arouse suspicion. Underlying chronic disease, immunosuppressive therapy, and smoking all appear to predispose to Legionnaires' Disease.[6]

A sporadic case of Legionnaires' Disease may be difficult to diagnose because many of its features also are seen with the other "atypical pneumonias." However, certain clinical features taken in aggregate may allow a presumptive diagnosis. These include high fever, relative bradycardia, recurrent chills, the early occurrence of diarrhea or other gastrointestinal symptoms, a minimal cough, and confusion or obtundation out of proportion to the temperature or hypoxemia. Laboratory findings of leukocytosis with a left shift, liver function test abnormalities, hyponatremia, and hypophosphatemia are non-specific but are also suggestive. If several of these findings are present, a presumptive diagnosis of Legionnaires' Disease can be made on clinical grounds, and therapy instituted with erythromycin.

Differentiating Legionnaires' Disease from mycoplasma pneumonia may be difficult in some instances. However, cold agglutinins, which may be elevated in mycoplasma infection, have not been observed to be increased in Legionnaires' Disease. Fortunately, erythromycin can be used with both infections.

Diagnosis of Legionnaires' Disease most often is established by serologic means (indirect fluorescent antibody) on specimens of serum. The New Jersey State Department of Health Laboratory conducts these tests on request when appropriate specimens are submitted.

To document a seroconversion, the first serum specimen

"Diagnosis of Legionnaires' Disease most often is established by serologic means (indirect fluorescent antibody) on specimens of serum."

"Direct fluorescent antibody examination of lung tissue obtained by biopsy or from autopsy specimens is the other common method of diagnosis."

"Erythromycin is the drug of choice if Legionnaires' Disease is suspected. Doses of 0.5 to 1.0 grams every six hours are recommended."

should be collected within seven days of onset, but a specimen as late as day 14 will be accepted. The convalescent serum must be collected at least three weeks after onset. If there are special circumstances which require the collection of a second specimen before three weeks, an earlier serum can be run by special arrangement with the laboratory. The serum of some patients does not increase in titer until six weeks after onset. If an early convalescent specimen does not show a seroconversion, it is entirely appropriate to submit a still later sample.

If an acute specimen is not collected, it is virtually impossible to confirm the diagnosis serologically. A high convalescent titer can indicate that the diagnosis is probable, but unless the prevalence of antibodies in the patient's community is known, it is difficult to infer the diagnosis from a convalescent titer.

Direct fluorescent antibody examination of lung tissue obtained by biopsy or from autopsy specimens is the other common method of diagnosis. Formalin-fixed lung from a heavily consolidated area is the best specimen.[14] Lung imprints made from fresh tissue may show the organism with special stains.[14]

Routine stains of sputum almost never reveal the organism. A silver impregnation stain may be attempted but would still allow only a presumptive diagnosis.[15] Culture for the organism is very difficult but can be attempted from pleural fluid, transtracheal aspirate, or lung biopsy specimens. The most available medium is Mueller-Hinton agar supplemented with 0.025 percent ferric phosphate (or 1 percent hemoglobin) and 0.04 percent L-cysteine HCl (or 2 percent Isovitalex, Baltimore Biological Laboratories, Cockeysville, Maryland).

Patients with Legionnaires' Disease have been treated with many different antibiotics. In this series of patients, several showed a dramatic improvement when erythromycin was administered, sometimes after showing little improvement on other agents. Based on similar clinical observations by others, and *in vitro* and *in vivo* laboratory evidence, erythromycin is the drug of choice if Legionnaires' Disease is suspected.[6] Doses of 0.5 to 1.0 grams every six hours are recommended. It may be administered intravenously or orally, although initial IV treatment seems preferable in a severely ill patient. Treatment should be continued for at least two weeks even if the patient shows a dramatic response, as patients occasionally have relapsed with shorter courses of therapy.

The epidemiology of Legionnaires' Disease is a subject of study both in New Jersey and nationally. Two of the cases (Patients #7 and #8) were associated with an epidemic in Texas, the epidemiology of which has been reported previously.[16] The fact that 11 of the 34 sporadic cases diagnosed in 1977-1978 in New Jersey occurred in four hospitals in one area of the state could reflect variations in prevalence of the disease or increased recognition of cases. No epidemics and no true cluster of cases have been recognized in New Jersey. The epidemiology of Legionnaires' Disease in the state will be the subject of a publication by the New Jersey State Department of Health.[4]

The true spectrum of Legionnaires' Disease is still emerging. Although most diagnoses of the disease, as in all patients in this series, are in adults hospitalized for severe pneumonias, milder illness undoubtedly occurs. Awareness of the disease and submission of appropriate specimens to the New Jersey State Department of Health Laboratories will aid in the understanding of this recently recognized disease.

REFERENCES

1. McDade JE, Shepard CC, Fraser DW, Tsai TR, Redus MA, Dowdle WR, Laboratory Investigation Team: Legionnaires' disease: Isolation of a bacterium and demonstration of its role in other respiratory disease. *N Engl J Med* 297:1197-1203, 1977.
2. Brenner DJ, Steigerwalt AG, McDade JE: Classification of the Legionnaires' Disease bacterium: Legionella pneumophila, genus novum, species nova, of the family Legionellaceae, familia nova. *Ann Intern Med* 90:656-658, 1979.
3. Ackley AM, Tambasica JJ: Legionnaires' Disease in New Jersey. *J Med Soc NJ* 75:245-247, 1978.
4. Personal Communication, Dr. John Slade, New Jersey State Department of Health.
5. Kirby BD, Snyder KM, Meyer RD, Finegold SM: Legionnaires' Disease: Clinical features of 24 cases. *Ann Intern Med* 89:297-309, 1978.
6. Swartz MN: Clinical aspects of Legionnaires' Disease. *Ann Intern Med* 90:492-495, 1979.
7. Gregory DW, Schaffner W, Alford RH, Kaiser AB, McGee ZA: Sporadic cases of Legionnaires' Disease: The expanding clinical spectrum. *Ann Intern Med* 90:518-521, 1979.
8. Lees AW, Tyrrell WF: Severe cerebral disturbance in Legionnaires' Disease. *Lancet* 2:1336-1337, 1978.
9. Williams WJ: *Hematology*. New York, McGraw-Hill, 1972, p. 483.
10. Burka ER, Weaver Z, Marks PA: Clinical spectrum of hemolytic anemia associated with G-6-PD deficiency. *Ann Intern Med* 64:817, 1966.
11. McDade JE, Brenner DJ, Bozeman FM: Legionnaires' Disease bacterium isolated in 1947. *Ann Intern Med* 90:659-661, 1979.
12. Friedman HM: Legionnaires' Disease in non-legionnaires: A report of five cases. *Ann Intern Med* 88:294-302, 1978.
13. Proceedings of the International Symposium on Legionnaires' Disease. *Ann Intern Med* 90:489-736, 1979.
14. Chandler FW, Hicklin MD, Blackmon JA: Demonstration of the agent of Legionnaires' Disease in tissue. *N Engl J Med* 297:1218-1220, 1977.
15. Faine S, Edelstein, P, Kirby BD, Finegold SM: Rapid presumptive bacteriological diagnosis of Legionnaires' Disease. *J Clin Micro* 10:104-105, 1979.
16. Convention-associated Legionnaires' Disease. *Morbidity & Mortality Weekly Report* 27:387-388, 1978.

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis should be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500. **Hydergine sublingual tablets 1 mg,** containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy,* Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android®/5 mg. Buccal/10 mg. Oral/25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Congenital Double Gastric Pylorus

URIE A. PARKHILL M.D., Neptune
KAMAL KASSIS M.D., Atlantic City*

We are presenting the unusual findings at surgery of a forty-five year-old female with a "double gastric pylorus." Microscopic findings on the receptive portion of the pylorus indicated that there were two distinct channels, with muscle fibers detectable between them.

Malformation of the gastric pylorus is rare. The majority of cases reported in the literature are of the acquired type, while only four cases of the congenital variety were reported. To the best of our knowledge, this is the fifth case.

CASE REPORT

A forty-five-year old obese female was admitted to Jersey Shore Medical Center because of intermittent bouts of upper gastric pain of two to three days duration; the pain was associated with nausea, vomiting and weakness. There was no radiation of pain or change in intensity during the day. There was no association with food intake.

The patient never had been hospitalized prior to this admission. Her past medical history was negative except for chronic anemia and mild hypertension.

Physical examination was within normal limits, except for moderate upper gastric tenderness; there was no rebound, guarding or palpable mass. The laboratory studies were normal except for a hemoglobin of 9.5 g/dl and a hematocrit of 31.7 percent . The stools were positive for occult blood. A gallbladder x-ray series and a barium enema were normal. An upper gastrointestinal x-ray series revealed a fistulous tract between the gastric antrum and the duodenum (figure 1) but no evidence of active ulceration was noted.

During the hospital stay her hemoglobin dropped to 7.0 g/dl grams and 27.2 percent hematocrit. A repeat upper gastrointestinal series still did not show evidence of ulceration.

Gastroscopic examination revealed a second opening in the lesser curvature beside the pyloric opening; bile reflux from the duodenum to the stomach was observed. There was no evidence of ulceration or gastritis. The esophagus was normal. A hematological evaluation was negative except for hypochromia. The patient was prescribed a diet for ulcer disease. She was transfused with four units of whole blood prior to surgery.

One week after admission exploratory laparotomy was performed and a one-stage sub-total gastrectomy with a Bilroth I procedure was carried out. In the gross specimen, a septum between two pyloric channels was identified.

The pathology report described a double pylorus with upper and lower orifice (figures 2a, b, c). The condition was believed to be congenital in origin since there were smooth muscle fibers in the duodenal septum (figure 3). In addition a superficial erosion was observed in the upper channel leading to the clinical appearance of upper gastrointestinal bleeding. The patient did well postoperatively. She had no evidence of occult blood or anemia and was discharged in good condition.

*Dr. Parkhill is attending surgeon at Jersey Shore Medical Center in Neptune and Dr. Kassis is affiliated with the Atlantic City Medical Center. Correspondence may be addressed to Dr. Parkhill at 2100 Corlies Avenue, Neptune 07753.

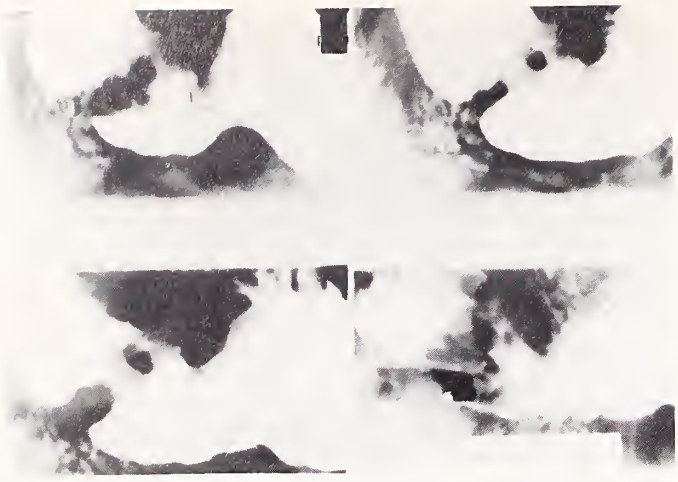
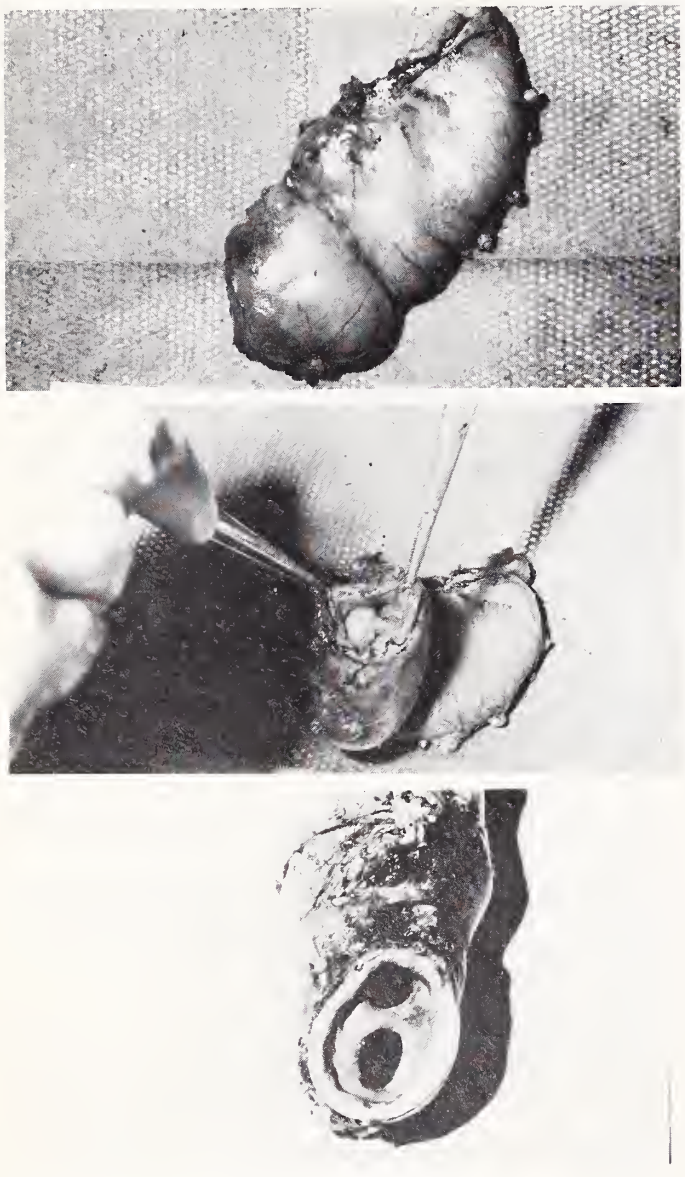


Figure 1—Reproduction of x-ray indicating double tract.



Figures 2a, b, c—Reproduction of the gross specimen.

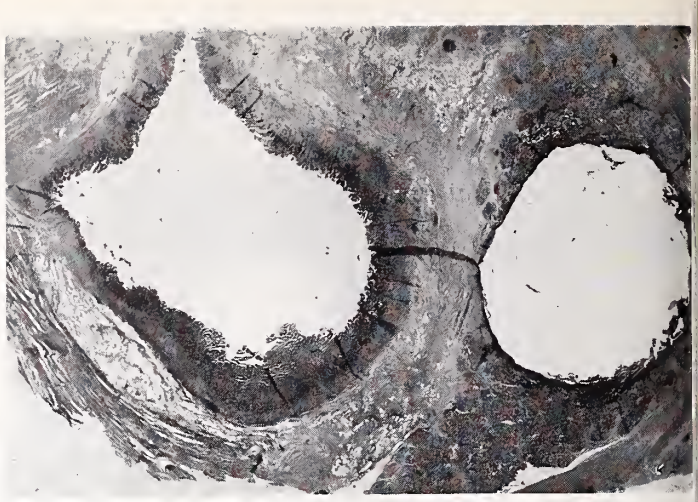


Figure 3—Microscopic photograph of fiber and the double channel.

COMMENT

There are two types of double pylorus: acquired and congenital.

In the *acquired type* it is postulated that penetration of a prepyloric ulcer into a duodenal ulcer may leave a septum between a pyloric and extra pyloric channel, i.e., two ulcers erode toward each other resulting in a duplication of the pylorus.[1] Followup x-ray studies, together with gastroscopic and visual examination of surgical specimens give a good indication of how the fistulous tract originated.

To understand the *congenital type* we must look into the embryology of the pylorus. We find that the foregut develops on the dorsal slit and begins to migrate. It is thought by some that duplication of the foregut may express itself as a cyst of the duodenum in the region of the pyloris, communicating with the duodenum and prepyloric area.[2,3]

SUMMARY

We reviewed the case of a patient with epigastric pain and anemia. X-ray findings together with endoscopic examination indicated an anomaly of the pylorus. In reviewing the literature, a double pylorus usually is acquired by a penetrating ulcer from the prepyloric region and duodenum forming a fistulous tract. A congenital anomaly is proved by microscopic examination of circular muscle fibers in this case. Because of the rarity we submitted this case study.

REFERENCES

1. Hansen OH, Dronborg O, Pedersen T: Double pylorus. *Scand J Gastroenterol* 7:695-696, 1972

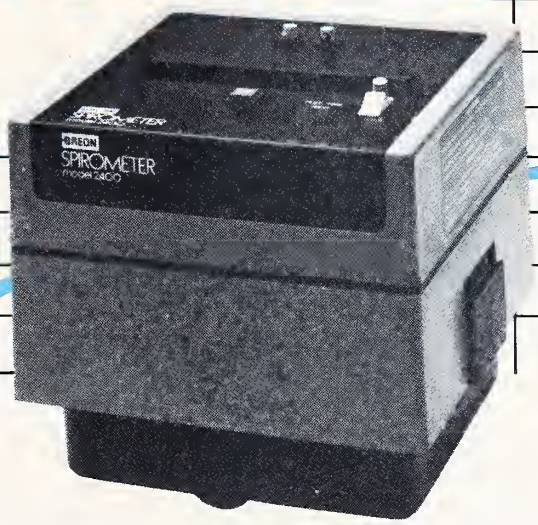
2. Kreinsen U, Kammerer W, Dohnert G: A contribution to the knowledge of the so-called pyloric band ("double pylorus"). *Virchows Archiv; A: Pathological Anatomy and Physiology* (Berlin) (formerly *Virchows Archiv; Abteiling A: Pathologische Anatomie* Berlin) 367:163-170, 1975

3. Farack UM, Goresky CA, Jabbari M, *et al:* Double pylorus: A hypothesis concerning its pathogenesis. *Gastroenterol* 66:596-600, 1974

Expand your office diagnostic capabilities

The BREON SPIROMETER

MODEL 2400



- As accurate as standard pulmonary laboratory instruments
- Easy and economical to operate
- Simple to interpret

You can see and test it for yourself in a five-minute personal demonstration. Just fill in and mail the coupon below.

BREON

BREON LABORATORIES INC.

Instrument and Life Support Division
90 Park Avenue
New York, N.Y. 10016

Mail to:

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Attn: M. Trepicchio

☐ Please send me more information about the Breon Spirometer Model 2400.

☐ Please have your representative call to arrange a personal demonstration.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Gastric Duplication Cyst

IBRAHIM M. IBRAHIM, M.D., MALCOLM MOSS, M.D., MAMOON JARRAH, M.D., MAURICE BALLAS, M.D. and HERBERT DARDIK, M.D., Englewood

Gastric duplication cysts are rare congenital anomalies, usually discovered at surgery. Excellent results can be achieved by simple excision and preservation of normal intestinal continuity. The mechanism for the embryogensis of these malformations is discussed.

Intestinal duplications may be found anywhere from the base of the tongue to the anus but they are most common in relation to the small intestine. These malformations also have been designated by descriptive terms such as enterogenous cyst, giant diverticula, and gastrothoracic cyst, depending upon specific characteristics and location of the lesion. Gross criteria for the diagnosis of intestinal duplication are: (1) the presence of an alimentary mucous membrane lining, (2) a smooth muscle coat and (3) intimate attachment to some portion of the gastrointestinal tract. Duplications of the stomach are quite rare, accounting for less than four percent of all enteric duplications.[15,24] This report adds another case to the 74 previously reported in the English language literature and summarizes the embryologic theories that may be responsible for these unusual enteric anomalies.

CASE REPORT

A 12-year-old female presented with upper abdominal pain, nausea and vomiting following a fall from a bicycle. On examination there were multiple abdominal skin abrasions with minimal epigastric tenderness. Because of recurrent vomiting, an upper gastrointestinal series was performed; it showed delayed emptying of the stomach. Barium enema examination was normal. Anorexia nervosa was considered and the child was referred for psychiatric treatment.

She was readmitted eight months later because of persistent vomiting and a 26-pound weight loss. A small tender right upper-quadrant mass was noted on physical examination. A repeat upper gastrointestinal series showed an almost complete gastric outlet obstruction with minimal widening of the duodenal sweep (figure 1). B-scan ultrasound confirmed the presence of a gastric mass. Intravenous pyelograms revealed duplication of the left renal calyces and ureter. Gastric decompression was instituted and after 48 hours, surgical exploration was performed. A cystic, edematous and inflamed mass was found contiguous with the gastric antrum along the greater curvature. It was adherent to the duodenum, pancreas and hepatic flexure. When the lesser sac was entered, a bifid pancreas was noted with one fork extending into the posterior leaf of the greater omentum and mesocolon for approximately 20 centimeters and the other lying in the normal anatomical position. There was no pancreatitis. The cystic mass was excised with a wedge of antrum that contained a communicating sinus tract. The gastric defect was closed primarily. The postoperative course was uneventful and the patient became totally asymptomatic. She gained five pounds in the subsequent two months.

*This study is from the Englewood Hospital, Englewood, NJ, where Drs. Ibrahim, Jarrah and Dardik are affiliated with the department of surgery; Dr. Moss with the department of pediatrics; and Dr. Ballas with the department of pathology. Correspondence may be addressed to Dr. Dardik at 155 Center Avenue, Fort Lee, NJ 07024.



Figure 1—Upper gastrointestinal series depicting gastric outlet obstruction

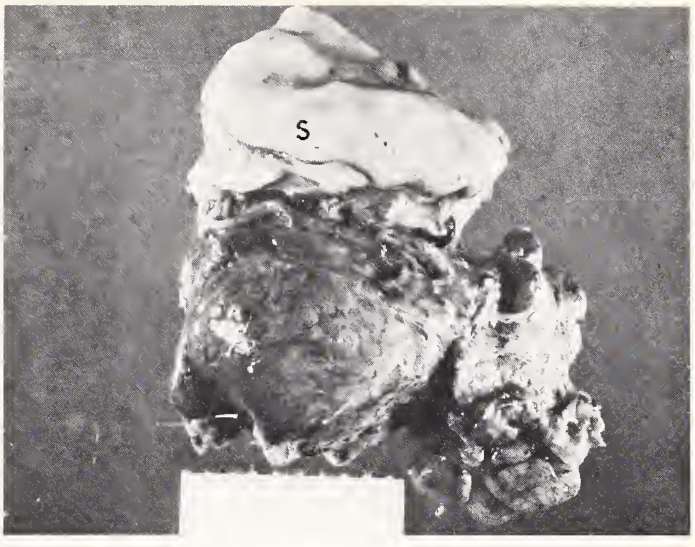


Figure 2—Gastric duplication cyst excised at surgery. Rim of normal gastric mucosa (s) is attached to cyst.

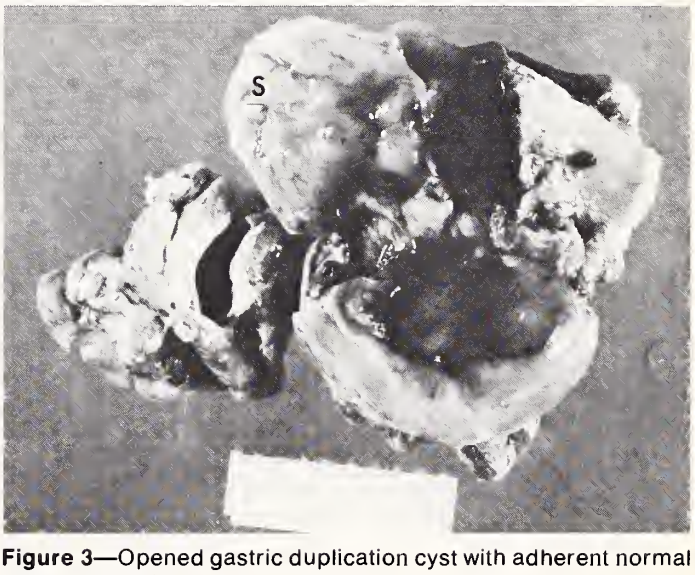


Figure 3—Opened gastric duplication cyst with adherent normal gastric wall (s).

PATHOLOGY

The cyst measured four centimeters in diameter and was filled with brown fluid (figure 2). It was lined by normal-appearing gastric mucosa except for an area of ulceration connected to the sinus tract. Microscopically the cyst wall was composed of gastric mucosa, submucosa, a thick muscle layer and a fibrotic serosa (figure 3). The sinus tract showed extensive necrosis penetrating into the gastric muscular layer, with fibrosis, vascular proliferation and evidence of both recent and old hemorrhage. The antral mucosa showed congestion and edema.

DISCUSSION

Enterogenous, gastric, embryonal and congenital cysts and supernumerary stomach all refer to a group of rare congenital anomalies of the stomach better known as gastric duplications. Since Wendel's original report of gastric duplication in 1911,[13] multiple reports have appeared in the literature.[3,6,8,10,14,16,17,19,21] Our patient is the 75th documented case.

Although several theories have been proposed to explain the embryogenesis of these enteric duplications, none can accurately account for the development of all duplications; it is quite possible that there are multiple mechanisms involved in the formation of different cysts.

Among the most popular of these theories, failure of vacuolar fusion is perhaps the best explanation.[1] During the sixth week of embryonic development, the number of epithelial cells in the intestinal tract so completely fills the lumen that it becomes a "solid" cellular mass. Secretions from these cells collect into droplets or vacuoles and failure of these vacuoles to coalesce may result in channels separate from the original lumen. This "duplication" may become a closed or a communicating cyst with the main intestinal lumen. The sequestration and diverticulum theories for the embryogenesis of intestinal duplication also can account for varieties of enterogenous cysts.[2,4,5] Abortive twinning in which a stimulus for duplication acts at an early stage of cell division and affects a certain section only of the embryo was considered by Edwards as an explanation for duplications.[7] This theory appears plausible for large segments of the intestinal tract, but is hardly likely for localized cysts or diverticula.

Intestinal duplications often are associated with other developmental anomalies. Twenty percent of the reported gastric duplications are associated with duplication in other intestinal segments.[14] Five percent are associated with vertebral anomalies, the majority of which are in the thoracic spine.[9,20] Other associated anomalies are ventricular septal defect, intestinal malrotation, ectopic or bifid pancreas, accessary spleen and pulmonary communications.[23] Our case had an associated bifid pancreas and duplication of the left renal collecting system.

Most gastric duplications are discovered within the first year of life, although their discovery as an incidental finding at autopsy has been documented.[14] Typically the infant is noted to have an asymptomatic abdominal mass. Gastrointestinal material may become trapped in the cyst setting up an inflammatory process with secondary pain, tenderness and obstructive symptoms. Acid peptic secretion may cause ulceration with bleeding or perforation.[18,26] Antral duplications can cause symptoms indistinguishable from hypertrophic pyloric stenosis.[15,25] Torsion of a pedunculated antral duplication cyst has been reported. Fistulization into the colon, abdominal wall and pleural cavity also has been described.[16,23,26] Mayo reported the only case of malignancy in a gastric cyst.[22]

The presenting symptoms may consist of pain, intermittent vomiting, failure to thrive, hematemesis, melena and anemia. Cysts extending into the mediastinum can cause dysphagia and respiratory difficulties.[21]

The criteria for diagnosis of gastric duplication include

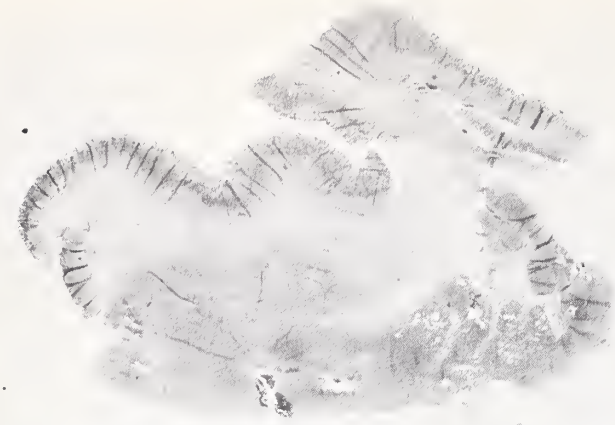


Figure 4—Microscopic view of segment of gastric duplication cyst, hematoxylin and eosin, 200 X.

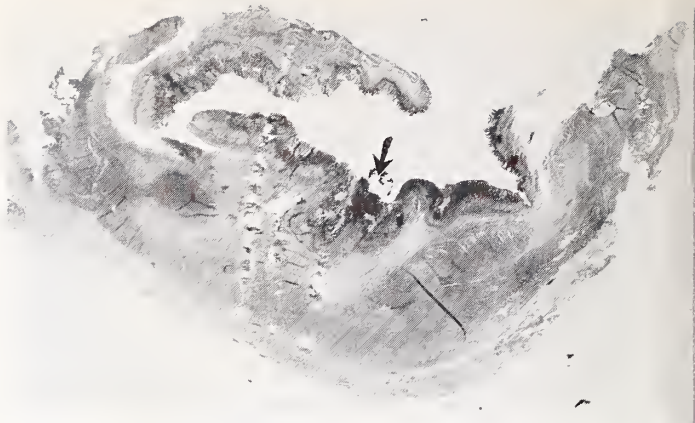


Figure 5—Normal gastric mucosa with area of communication from duplication cyst with secondary inflammatory changes (arrow).

proximity or continuity with the stomach wall, a lining composed of alimentary epithelium and a smooth muscle layer continuous with the gastric musculature. The blood supply of the cyst is derived from the adjacent stomach. Because of the rarity of this entity and its various modes of presentation, diagnosis is invariably made at the time of surgery. Thorough exploration of the abdomen to delineate other anomalies is mandatory and will avoid inadvertent injury to these structures. Excision of the cyst with preservation of intestinal continuity is the procedure of choice. A rim of normal gastric tissue often is removed with the cyst. If the duplication is attached over a wide area then a large cystogastrostomy may be constructed. A partial gastric resection may be necessary, but total gastric extirpation is not justified for this basically benign disorder. Drainage or marsupialization is avoided because it results in prolonged hospitalization and increased morbidity.

SUMMARY

Gastric duplication cysts are rare congenital anomalies, usually discovered at surgery for bleeding, obstruction or palpable abdominal mass. Excellent results can be achieved by simple excision and preservation of normal intestinal continuity. The most likely mechanism for the embryogenesis of these malformations is the failure of vacuolar fusion during early embryonic development.

REFERENCES

1. Bremer J L: Diverticula and duplications of the intestinal tract. *Arch Path* 38:132-140, 1944.

2. Lewis FT and Thyng FW: The regular occurrence of intestinal diverticula in embryos of the pig, rabbit and man. *Am J Anat* 7:505, 1907.

3. Bishop HC and Koop CE: Surgical management of duplications of the alimentary tract. *Am J Surg* 107:434, 1964.

4. Dardik H and Klibanoff E: Retroperitoneal enterogenous cyst: Report of a case and mechanisms of embryogenesis. *Ann Surg* 162:1084, 1965.

5. Salvin AA: Retroperitoneal cyst. *Med J Rec* 127:256, 1928.

6. Gross RE, Holcomb GW and Farber S: Duplication of the alimentary tract. *Pediatr* 9:449, 1952.

7. Edwards H: Congenital diverticula of the intestine with the report of a case exhibiting heterotopia. *Br J Surg* 17:7, 1929.

8. Hudson HW Jr: Giant diverticula or reduplications of the intestinal tract *N Engl J Med* 214:1123, 1935.

9. McLetchie NGB, Purves JK and Saunders RL: Genesis of gastric and certain intestinal diverticula and enterogenous cysts. *Surg Gynec Obstet* 99:135, 1954.

10. Gray HK and Ward GA: Cystic tumors of the stomach. *Surg Clin N Am* 18:1069, 1938.

11. Sheppard MD and Gilmour JR: Torsion of a pedunculated gastric cyst. *Br Med J* 1:874, 1945.

12. Bockus HL: *Gastroenterology,* 2nd edition (Vol. 1). Philadelphia, Saunders, 1963, pp. 914-919.

13. Wendel W: Bershreibung eines operativentfernten congenitaen Nebenmagens. *Arch Klin Chir* 95:895-899, 1911.

14. Bartels RJ: Duplication of the stomach: Case report and review of the literature *Am Surg* 33:747-752, 1967.

15. Alschibaja T, Putnam TC and Yahlin BA: Duplication of the stomach simulating hypertrophic pyloric stenosis. *Am J Dis Child* 127:120-122, 1974.

16. Parker BC, Burhrie J, France NE: Gastric duplications in infancy. *J Pediatr Surg* 7:294-298, 1972.

17. Torma MJ: Of double stomach. *Arch Surg* 109:555-557, 1974.

18. Tabrisky J, Szalay GC, Meade WS: Duplication of the stomach: A cause of anemia. *Am J Gastroenterol* 59:327-331, 1973.

19. Rowling JT: Some observations on gastric cysts. *Br J Surg* 46:441-445, 1959.

20. Dorsey, JF, Tabrisky J: Intraspinal and mediastinal foregut cyst compressing the spinal cord. *J Neuro Surg* 24:562-567, 1966.

21. Mellish RW, Koop CE: Clinical manifestation of duplication of the bowel. *Pediatr* 27:397-407, 1961.

22. Mayo HW Jr, *et al:* Carcinoma arising in reduplication of the stomach (gastrogenous cyst): A case report. *Ann Surg* 141:550-555, 1955.

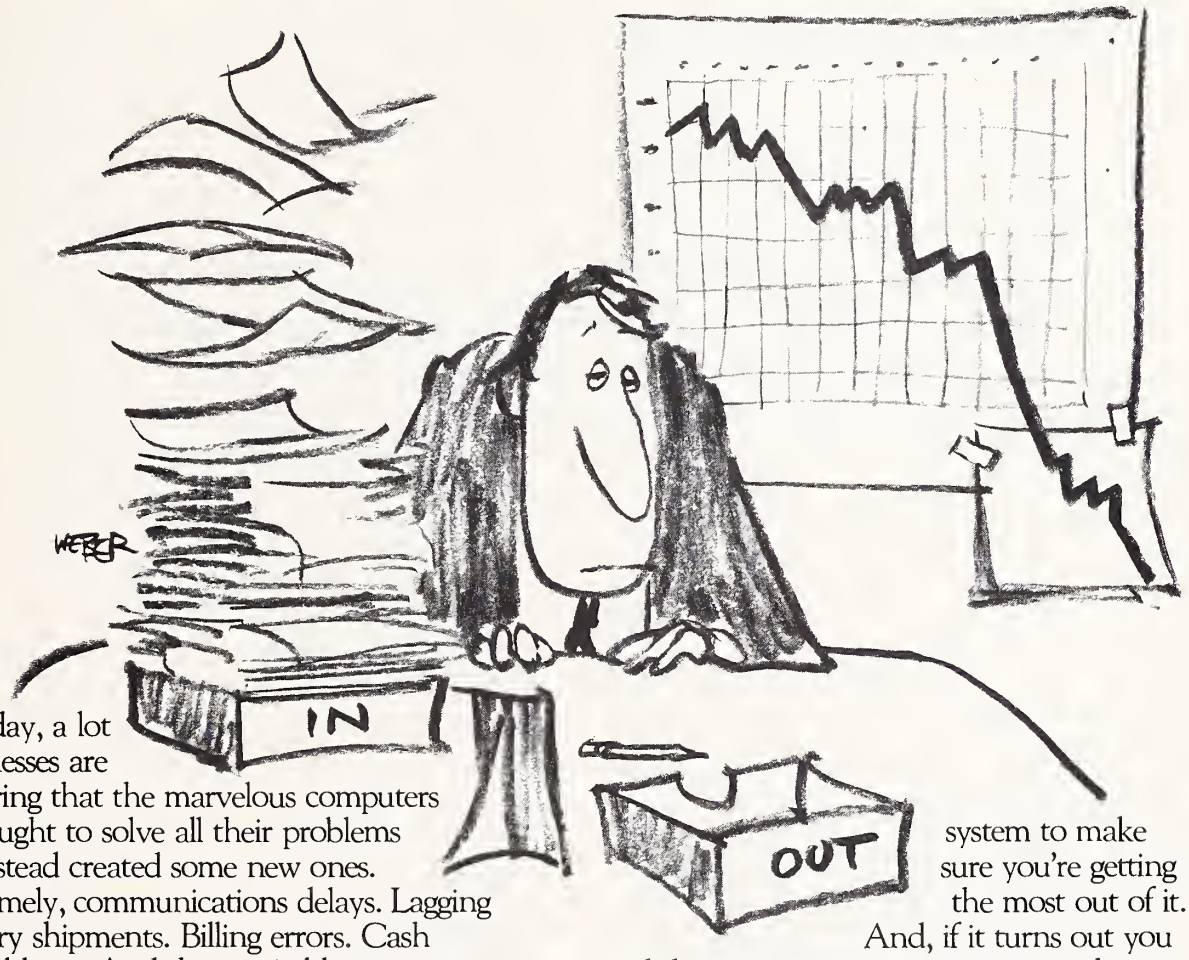
23. Shochat ST, *et al:* Perforated gastric duplication with pulmonary communication: A case report. *Surg* 70:370-374, 1971.

24. Silverman A, *et al: Pediatric Clinical Gastroenterology.* St. Louis, Mosby, 1971 pp. 69-73.

25. Ramsay GS: Enterogenous cyst of the stomach simulating hypertrophic pyloric stenosis. *Br J Surg* 44:632-633, 1957.

26. Kremer RM, Lepoff RB, Izant RJ Jr: Duplication of the stomach. *J Pediatr Surg* 5:360-364, 1970.

OUR ACCOUNT EXECUTIVES CAN HELP YOU SOLVE PROBLEMS MOST BUSINESSES ARE JUST BECOMING AWARE OF.



Today, a lot of businesses are discovering that the marvelous computers they bought to solve all their problems have instead created some new ones.

Namely, communications delays. Lagging inventory shipments. Billing errors. Cash flow problems. And the inevitable customer complaints.

Call New Jersey Bell first.

If your company is wrestling with these kinds of problems, call in your New Jersey Bell Account Executive. Right now.

That's when their expertise in the knowledge business can do your business the most good.

Our industry-trained Account Executives are backed by a team of specialists who are experts at planning, designing and implementing integrated voice and data communications systems.

They can help you evaluate your current system to make sure you're getting the most out of it.

And, if it turns out you need data access equipment, you can choose from our whole family of high-speed, low-cost terminals designed to let your managers, purchasing agents and other employees communicate with your computers and other data terminals.

Instantly.

We can help you turn useful information into usable information.

If your company isn't making the best use of all the information it has, call in your New Jersey Bell Account Executive.

That's the best way to find out what you need.

And what you <u>don't</u> need.

The knowledge business

New Jersey Bell

REVIEW ARTICLE

Update of Developments in Obstetrics and Gynecology

LESLIE IFFY, M.D., JAMES R. JONES, M.D.
THOMAS F. ROCERETO, M.D., JAMES P. THOMPSON, M.D., Paterson*

Newer developments in the field of obstetrics and gynecology are presented along sub-specialty lines. An attempt is made to highlight current approaches to patient management and familiarize the practicing obstetrician-gynecologist with areas of interest on the horizon.

In an effort to assist practitioners who render health care to women, selected members of the New Jersey Obstetrical and Gynecological Society have prepared the following synopsis of recent developments in the field of obstetrics and gynecology. The sheer volume of literature introducing new concepts and reviewing old has made it difficult to keep abreast. The emergence of new special interest journals has led, in addition, to a dispersal of pertinent information away from the time-honored three or four acclaimed specialty journals. Philosophical tenets of the practice of obstetrics and gynecology have changed somewhat with the movement to regionalize the care of high-risk obstetric patients and those with gynecologic cancer, and with the designation of certification of subspecialties. The realities of practice have been modified by the introduction of newer diagnostic techniques such as laparoscopy, colposcopy, and amniocentesis for the detection of genetic disorders. Current information is presented along subspecialty lines.

REPRODUCTIVE ENDOCRINOLOGY

Subspecialty designation has evolved simply because the field of endocrinology has become too complex and too laboratory-oriented to be grasped reasonably by all clinicians. Its complexity grew out of concepts that were nonexistent when many of us were in medical school and these concepts were the progeny of improvements in laboratory techniques. Radio-immunoassay[1] has added countless themes to our repertoire. Any recounting of accomplishments in reproductive endocrinology is basically a litany of laboratory achievements.

Within the past few years our understanding of the differentiation of maleness and femaleness has undergone enormous upheaval. Our previous sense of symmetry (46, XX equals a fetus with ovaries; 46, XY a fetus with testes) has been replaced with wonderment.[2] The Y chromosome produces the H-Y antigen[3,4]; the H-Y antigen induces testicular formation; the fetal testes, stimulated by HCG from the placenta, produce testosterone and dihydrotestosterone which in turn cause internal and external virilization.[5] All this happens prior to the fourteenth intrauterine week. The female differentiates when a male does not. These concepts have assisted in the explanation of a number of entities, including gonadal dysgenesis and hermaphroditism.

The description of the female's "positive" feedback[6] (the ovulatory surge of LH and FSH with increasing serum levels of 17-B-estradiol) was the basic observation that opened the

Dr. Iffy is Professor of Obstetrics and Gynecology, CMDNJ, New Jersey Medical School, Newark; Dr. Jones is Professor and Chairman, Department of Obstetrics and Gynecology, CMDNJ, Rutgers Medical School, Piscataway; Dr. Rocereto is Chief Gynecologic Oncologist, Cooper Medical Center, Camden; Dr. Thompson is Chairman, Department of Obstetrics and Gynecology, St. Joseph's Medical Center, Paterson. Correspondence may be addressed to Dr. Thompson at 703 Main Street, Paterson 07503.

"Plasma prolactin determinations should be obtained on every woman with amenorrhea."

"No longer a relatively unusual diagnosis, endometriosis is rather common and can be diagnosed accurately with the laparoscope.

door to an understanding of the polycystic ovary syndrome. The patient with irregular menses, slight hirsutism, and infertility is no longer an enigma. The key was insight into the positive feedback. The ovaries are potentially quite normal, while the defect is in the hypothalamus and medically remedial. Although not a long-term cure, this is certainly a short-term infertility cure.

Circulating prolactin concentrations now can be measured accurately.[7] At first, prolactin observations simply were interesting (rising in pregnancy, increasing in spurts with breast feeding) but now they are fascinating and useful. They are one of the best "windows" we have to pituitary-hypothalamic function. They have been the single most significant factor in our ability to detect pituitary adenomas in amenorrheic women. Plasma prolactin determinations should be obtained on every woman with amenorrhea. Pituitary adenoma (albeit, "micro" adenomas) are far more common than we ever believed before the availability of plasma prolactin levels.[8] Hand-in-hand with this remarkable increase in our diagnostic abilities came an equally significant increase in our ability to treat. Brom ergocryptine (Parlodel®) lowers serum prolactin and initiates normal ovulatory and menstrual cycles in the majority of hyperprolactinemic patients.[9] Although many reproductive endocrinologists are not convinced yet of its safety in pregnancy, it is a most handy and effective agent.

Much can be written extolling the virtues of laparoscopy but one individual in whom it has made a perceptible difference is the patient with endometriosis. No longer a relatively unusual diagnosis, endometriosis is rather common and can be diagnosed accurately with the laparoscope. The laparoscope has reduced the incidence of unexplainable infertility from 15 to about 5 percent. This difference has been due mainly to an increase in the diagnosis of endometriosis. Here again better diagnosis has led to better treatment modalities such as the use of danazol (Danocrine®).[10-11] Where endometriosis exists without adhesions, the concept is gaining that the treatment is medical regardless of the extent of the endometriosis.

Induction of ovulation has finally settled into its appropriate place. We all know and use clomiphene citrate Clomid®,[12] which is a good first offense. But clomiphene frequently fails and human chorionic gonadotrophin (hCG) and estrogen additives are rarely helpful. Human menopausal gonadotropin (hMG) or Pergonal®, used properly, is effective.[13] With the appropriate laboratory backup (a plasma 17 B-estradiol level available within hours of blood collection), hMG can be used to induce ovulation in any non-ovulatory patient who does not have primary ovarian failure. Without a most reliable and rapid laboratory, hMG is a dangerous drug.

To complete the picture fairly all is not entirely satisfactory. Because of our failure to heed previous mistakes and to think we can correct disorders without understanding their pathophysiology we have come to microsurgery on the Fallopian tubes. Consideration of the Fallopian tubes as mere conduits or anatomic tunnels that simply direct oocytes to waiting sperm has deceived us and led to failure. Microsurgical methods can indeed repair tubes (especially tubes undamaged by previous disease) but the pregnancy rates do not match our "surgical cures." We still have to learn more about tubal function and the biochemical interplay between the oocyte and the tube.

Much more fundamental research should be completed rather than continuing to offer expensive, cumbersome, and inefficient therapy. Instant and automatic approval is, of course, granted to all of us when we say, "She wants a pregnancy and what else can I do?" There is no ready answer to the problem of tubal occlusion other than the hope that eventually we can sidestep the tubes with *in vitro* fertilization.[14]

GYNECOLOGIC ONCOLOGY

The gynecologic oncologist and the clinical gynecologist are both investigating the prevention and treatment of cancer of the female organs. In the past few years, there have not been many significant changes with respect to carcinoma of the uterine cervix. The use of radiotherapy as both adjunctive and primary therapy is being evaluated in the treatment of carcinoma of the vulva, but it is too early to report any definitive results.

There has been, in recent years, an increased interest in the pathophysiology and treatment of carcinoma of the endometrium.[15] The routine treatment for patients with Stage I carcinoma of the endometrium has been preoperative radiotherapy followed in six weeks by an extrafascial total abdominal hysterectomy and bilateral salpingo-oophorectomy. Today, investigators are questioning whether more information about the tumor is needed for therapeutic and prognostic purposes prior to radiotherapy, and whether radiotherapy is necessary in all cases.

The staging system set up by the International Federation of Obstetricians and Gynecologists (FIGO) for carcinoma of the endometrium includes both the depth of the endometrial cavity and the histological grade of the tumor in Stage I disease. A depth of the endometrial cavity of eight cm or less correlates well with the finding of a small amount of tumor. A uterine cavity which sounds to more than eight cm. may be enlarged by a benign condition, which is not necessarily tumor.

When hysterectomy is performed prior to radiotherapy a more complete evaluation of the type and extent of tumor is possible than if the dilatation and curettage is followed by radiotherapy. Following this plan of treatment, the

"While patients treated for ovarian carcinoma have survived longer in recent years, the overall five-year cure rate has changed little in the past twenty years.[19]"

". . . It is already apparent that the overall effect of regionalization upon the standards of antenatal, intrapartum and neonatal care is favorable.[25]"

gynecologist and radiotherapist not only will know the overall differentiation of the tumor which may differ from that obtained at the time of the D and C, but also will know the amount of tumor present, the depth of its penetration into the myometrium, and the absence or presence of occult involvement of the endocervical tissue. These findings may change the type and amount of radiotherapy to be given and may help in evaluating the patient's prognosis. They also may influence the use of other methods of treatment, such as chemotherapy. The higher the histologic grade of tumor and/or the deeper its penetration into the myometrium, the greater are the chances that the pelvic lymph nodes will be involved with tumor.[16] Investigations into lymph node involvement of endometrial carcinoma show that patients with Stage I grade 3 disease have a 30 percent incidence of tumor involvement of the pelvic lymph nodes and a five percent incidence of tumor involvement of the para-aortic and common iliac lymph nodes.

Whether surgery is preceded or followed by radiotherapy does not seem to influence the overall survival. It is suggested that the patient with Stage 1a or 1b grade 1 adenocarcinoma of the endometrium have surgical treatment first. [17] With the finding of a small amount of tumor in the endometrial cavity and invasion of less than one-third of the myometrium, radiotherapy may not be necessary, or if desired, it may be given only with a vaginal cylinder. If one-third or more of the myometrium is invaded by the tumor, external radiotherapy is required. In the patient with a Stage 1a or 1b grade 2 tumor, it is suggested that selective removal of the common iliac and external iliac lymph nodes be performed at the time of the hysterectomy, especially if these lymph nodes are enlarged. This dissection should be performed only by gynecologists who have experience with this type of surgery. In the patient with grade 3 tumor, it is strongly suggested that the selective lymph node removal be done for full pathologic evaluation of the tumor.

Even though lymph node dissection in endometrial carcinoma is still in the investigational stages, it should be considered in all patients with Stage 1 grade 3 tumor. It is not known whether extending the field of external irradiation to include tumor-involved nodal areas in patients with endometrial carcinoma significanly improves the overall survival. With continued investigation of this technique, it is hoped that an answer is only a short time away.

There are always new concepts in the treatment of ovarian carcinoma.[18] New chemotherapeutic agents are being tried. The addition of Cis-Platinum to the initial treatment regimen for this disease has raised hopes of improving the overall survival. While patients treated for ovarian carcinoma have survived longer in recent years, the overall five-year cure rate has changed little in the past twently years. A reevaluation of the second-look laparotomy is occurring at present.[20] Most gynecologic oncologists agree that laparoscopy is useful only if gross, unresectable tumor is found.[21] If no evidence of tumor is seen, then an exploratory laparotomy must be performed. The second look has been useful in those patients who still have residual disease and who may benefit from continued chemotherapy. It is these patients who may have an increased survival time, but not necessarily be cured. Since some chemotherapeutic agents can cause other major problems for the patients (e.g., leukemia after treatment with the alkylating agents)[22], it is desirable to discontinue these drugs in the patient who is found not to have histological evidence of disease at the second-look operation.

MATERNAL-FETAL MEDICINE

The United States has established a distinguished place in medical research during the last fifty years. Despite the special role that North American investigators played in the progress of "midwifery" throughout the 20th century, as little as five decades ago maternal mortality rates in this country were among the highest in the world.[23] The picture improved, but did not change entirely, during the subsequent decades. Perinatal mortality, generally considered as a relatively accurate index of perinatal care, is still higher in the United States than in many Scandinavian and West European countries.

The recognition of this undesirable trend has resulted in a concentrated effort by the Federal government and representative bodies of the medical profession to improve the care of the pregnant woman and the newborn infant. Regionalization of obstetric and newborn services is a major progressive step even if enforced regimentation conflicts with individual and institutional interests in some instances.[24] Although this and other factors may obscure the picture, it is already apparent that the overall effect of regionalization upon the standards of antenatal, intrapartum and neonatal care is favorable.[25] There is little doubt that the concept of concentrating "high-risk" patients into specially designed and equipped centers will be adopted in the near future in many other fields of medicine on the basis of the results observed in perinatology.

Ironically, whereas there is an almost general agreement among experts concerning the necessity of diverting gravidas, parturients and newborn infants to special centers, considerable controversy exists with regard to the respective values of the individual factors that have been utilized in high-risk centers for improving perinatal morbidity and mortality rates. Many authorities attribute the marked improvement that occurred around the turn of the last decade to the introduction of intensive intrapartum and antepartum fetal monitoring involving advanced electronic technology.[26] By contrast, an authoritative minority maintains that the time relation between the introduction of biophysical

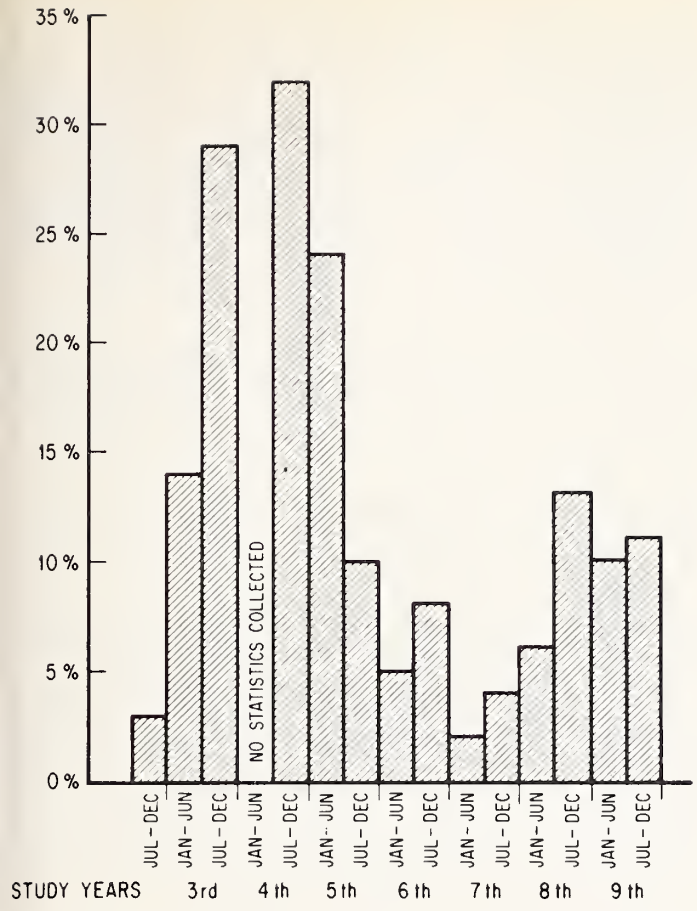


Figure 1—The rate of post-Cesarean womb infections during an eight-year period, according to the Infection Committee's statistics—based upon the data of the University of Illinois Health Sciences Center. By the courtesy of Dr. Kenrad E. Nelson.

monitoring techniques and the improvements of perinatal statistics has been incidental.[27] According to this interpretation, the changing philosophies with regard to the conduct of normal and abnormal labor,[28] the active management of various obstetric complications, such as breech presentation, antepartum hemorrhage, and others, the more conservative use of the obstetric forceps, and the rules demanding the administration of obstetric anesthesia by specially trained personnel, have been largely responsible for the recent improvements. This difference of views never may need to be resolved conclusively since further improvements in the field of electronic technology and more strict observance of the above-quoted principles of obstetric practice both may contribute in the future to an optimum standard of care within properly designed, staffed and equipped perinatal centers.

Some authorities have suggested that the rapid progress in various fields of obstetrics and neonatology has resulted in the virtual abandonment of some basic concepts of perinatal care.[29] Infection control is perhaps the most important case in point. There are data to indicate the postoperative infections in general and post-cesarean wound infections in particular have increased both in number and severity in recent decades and that this development has been caused, or promoted, by the failure of individual physicians and hospitals to observe existing regulations relevant to infection control.[30-32] In one institution, the reintroduction of rigid infection control measures resulted in a precipitous decline of post-cesarean wound infections without the use of perioperative antibiotics.[33] (Figure 1) The marked reduction of all types of nosocomial infections was accompanied by a significant decrease in the relative frequency of gram negative infections, thus reversing the trends observed all over the world during the last two or three decades.[34] This demonstrates the fact that progress in some areas of obstetrics and surgery may have entailed removal of emphasis or regression in others. Indeed, such trends may be intrinsic to rapid changes and excessive emphasis upon new developments.

Another somewhat unforeseen aspect of the rapid spread of new technology has been the reaction of the public to the introduction of machines into an area which has been perceived for centuries as an intimate and emotionally charged human experience. In recent years, there has been an increasing demand for "natural childbirth," preferably in an atmosphere which emphasizes the humane aspects of the birth process and removes the frightening atmosphere created by the computer-directed robots that have partially replaced physicians, midwives, and sympathetic relatives. While frequently overstated and unnecessarily dramatized, these demands have drawn attention to the fact that the need for human empathy and attention has remained largely unconsidered amidst well-intended efforts directed at the reduction of perinatal mortality and morbidity rates. Even more important, the research that followed this new trend established the superior safety of natural childbirth over labors and deliveries conducted under the usual institutional routines, involving conduction anesthesia, heavy sedation, elective induction, liberal use of forceps, and so on. [29-35]

With increasing emphasis upon prevention, it has become inevitable to view current trends in family planning against the background of future pregnancy and childbirth—the final target of all birth control methods. It is disturbing that despite the plethora of birth control information for all women, the rate of teenage pregnancies has shown a rapid increase both in the United States and elsewhere.[36] Teenage pregnancy being a well-recognized, obstetric, high-risk factor, this trend represents an undesirable development. Not less worrisome is the fact that induced abortion has been found to be conducive to premature birth in subsequent pregnancies in Hungary, Japan and several other foreign countries.[37-38] This conclusion seems to be supported by an ongoing, although yet incomplete National Institute of Health-sponsored prospective study, involving several thousands of cases and controls, conducted in the State of New York. Thus, it appears that a number of factors may influence future trends in perinatal mortality rates, some of which appear rather unfavorable.

Whereas the ability of physicians to prevent the occurrence of reproductive losses seems to be limited at present, new technology has provided increasingly efficient means for identifying malformed or genetically abnormal fetuses at a relatively early stage of gestation. Antenatal diagnosis of fetal defects, involving biochemical analysis of the amniotic

. . . "Despite the plethora of birth control information for all women, the rate of teenage pregnancies has shown a rapid increase both in the United States and elsewhere.[36]"

fluid and maternal blood, cytogenetic investigation of fetal and maternal cells, as well as sonography made it possible to detect a wide range of anomalies during early gestation. While the ideal must remain the prevention of birth defects, for the time being, genetic counseling provides the best practical answer for potential candidates for a defective offspring.

Far too often in medical history physicians either failed to recognize important discoveries and observations, or overestimated new concepts, methods and techniques. There is evidence that some of the recent technical advances, having expanded at the expense of some time-proven concepts, failed to fulfill the expectations of the medical profession.[27] This experience permits the expectation that further progress during the forthcoming years may result from an evolutionary process, incorporating the experience of many decades, rather than from the fast-emerging new products of modern technology.

REFERENCES

1. Berson SA and Yalow RS: General principles of radioimmunoassay. *Clin Chim Acta* 22:51, 1968.
2. Jost A, Vizier B, Prepin J, and Perchellet JP: Studies on sex differentiation in mammals. *Prog Horm Res* 29:1, 1973.
3. Wachtel SS, Koo GC, Greg WB, *et al*: Serologic detection of a Y-linked gene in XX males and XX true hermaphroditism. *N Engl J Med* 295:750, 1976.
4. Bennet D, Mathieson BJ, and Scheid M: Serological evidence for H-Y antigen in sxr, ss sex reversed phenotypic males. *Nature* (London) 265:255, 1977.
5. Siiteri PK and Wilson JD: Testosterone jourmotion and metabolism during sexual differentiation in the human embryo. *J Clin Endocrinol Metab* 38:113, 1974.
6. Yen SSC, Jafee RB: *Reproductive Endocrinology*. Philadelphia, Saunders, 1978, pp. 126-151.
7. Sinah YN, Selly FW, Lewis VI, and Vanderlaan WP: A homologous radioimmunoassay for human prolactin. *J Clin Endocrinol Metab* 36:509, 1973.
8. Franks SS, Jacobs H, and Nabarro JDN: Studies of prolactin in pituitary disease. *J Endocrinol Metab* 67:55, 1975.
9. Jacob, H, Franks SS, Hudd MGR, Steele SG, and Nabarro, JDN: Bromocryptine and secondary amenorrhea. *Lancet* 1:402, 1976.
10. Friedlander RL: Experience with danazol in therapy of endometriosis. *Excerpta Medica*. International Congress Series. No. 368, p. 100, 1976.
11. Dmowski WP and Scommegna A: The rationale for treatment of endometriosis with danazol. *Excerpta Medica*. International Congress Series. No. 368, p. 87, 1976.
12. Rust LA, Israel R, and Mishell AR: An individualized graduated therapeutic regimen for clomiphene citrate. *Am J Obstet Gynecol* 120:785, 1974.
13. Kemmann E, Shelden R, Tavakoli F and Jones JR: Induction of ovulation with hMG/hCG in women with the polycystic ovary syndrome (in press).
14. Steptoe P: (Presentation at ACOG meeting, New York, N.Y. April 2, 1979).
15. Morrow CP, DiSaia PJ and Townsend DT: Current management of endometrial carcinoma. *Obstet Gynecol* 42:399, 1973.
16. Malkasian GD Jr: Carcinoma of the endometrium: Effect of stage and grade on survival. *Cancer* 41:996, 1978.
17. Salazar OM, *et al*: The management of clinical stage I endometrial carcinoma. *Cancer* 41:1016, 1978.
18. Piver SM, Barlow JJ, Lee FT, and Vongtama V: Sequential therapy for advanced ovarian adenocarcinoma: Operation, chemotherapy, second-look laparotomy and radiation therapy. *Am J Obstet Gynecol* 122:355, 1975.
19. Aure JC, Hoeg K, and Kolstad P: Clinical and histologic studies of ovarian carcinoma: Long-term followup of 990 cases. *Obstet Gynecol* 37:1 1971.
20. Smith JP, Delgado G, and Rutledge R: Second-look operation in ovarian carcinoma. *Cancer* 38:1438, 1976.
21. Rosenoff SH, Young RC, Anderson T, Bagley C, Chabner B, Schein PS, Hubbard S, and DeVita VT: Peritoneoscopy: A valuable staging tool in ovarian carcinoma. *Ann Intern Med* 83:37, 1975.
22. Reimer RR, Hoover R, Fraumeni JF, Jr. and Young RC: Acute leukemia after alkylating-agent therapy of ovarian cancer. *N Engl J Med* 297:177, 1977.
23. Woodbury RM: Maternal mortality: The risk of death in childbirth and from all diseases caused by pregnancy and confinement. US Dept. of Labor, Children's Bureau. Bureau Publ. No. 158, Washington, GPO, 1926.
24. Wingate MB: Health care planning for the high risk parturient. In: HA Kaminetzky and L Iffy (eds) *Progress in Perinatology*. Philadelphia, George F Stickley Publ, 1977, p. 355.
25. Ryan GM, Sielden JG: The impact of regionalization program on patterns of perinatal care. *Obstet Gynecol* 53:187, 1979.
26. Hamilton LA Jr, Gottschalk W, Vidyasgar D, *et al:* Effects of monitoring high-risk pregnancies and intrapartum fetal heart rate monitoring on perinates. *Interna J Gynaecol Obstet* 15:483, 1978.
27. Goodlin RC: Intrapartum electronic fetal monitoring: Is it all worthwhile? In: HA Kaminetzky and L Iffy (eds). *Progress in Maternal-Fetal Medicine*. New York, Van Nostrand Reinhold, 1979.
28. Friedman EA: *Labor: Clinical Evaluation and Management*, 2nd ed. New York, Appleton-Century Crofts, 1978.
29. Iffy L, Kaminetzky HA, Nelson KE, *et al*: The impact of traditional preventive measures upon the rate of perinatal infections. *Obstet Gynecol* (In press).
30. Hockuli E: Infektionen i-der geburtshilfe und gynäkologie. *Gynäk Rundsch* 16: (Suppl. 1) 52, 1976.
31. Altmeier WA: *Current Infection Problems in Surgery*. Proceedings of the International Conference on Nosocomial Infection. Baltimore, Waverly Press, 1971.
32. Ledger WJ: Bacterial infections complicating pregnancy. *Clin Obstet Gynecol* 21:455, 1978.
33. Iffy L, Kaminetzky HA, Nelson KE, *et al*: The impact of traditional preventive measures upon the rate of perinatal infections. *Obstet Gynecol* (In press).
34. Eickhoff TC: The changing flora: From friend to foe. In: C.M. Kunin (ed). *Hospital Sepsis*. Deerfield, Ill. MEDCOM Publ, 1972.
35. Zax M, Sameroff AJ, Farnum JE: Childbirth education, maternal attitudes and delivery. *Am J Obstet Gynecol* 123:185, 1975.
36. Russo J: Teenage pregnancy. In: HA Kaminetzky and L Iffy (eds.) *Progress in Maternal-Fetal Medicine*. New York, Van Nostrand Reinhold, 1979.
37. Pohanka Ö, Török I: A gestatios események alakulása ès a koraszülés kérdés összefüggese hazánkban 1934 és 1970 között. *Orv Hetil* (Budapest) 117:965, 1975.
38. Moryama Y, Korokowa O: The relationship between artificial interruption of pregnancy and abortion on premature birth. In: Family Planning Federation of Japan. *Harmful Effects of Induced Abortion*. Tokyo, 1966.

STATE OF THE ART

Management of Refractory Ventricular Tachycardia

EDWIN L. ROTHFELD, M.D., Newark*

The essence of current management of refractory ventricular tachycardia is correct diagnosis, correction of underlying etiological factors, and appropriate treatment. The latter may include pharmacologic agents, electrical pacing or "cardioversion" and surgical intervention, depending on the individual circumstances.

It is my impression that ventricular tachycardia (VT) is, all too often, deemed "refractory" when, in fact, the patient's arrhythmia has failed to respond to conventional therapy because of improper diagnosis, failure to appreciate the setting in which the mechanism arose or inadequate medical therapy.

DIAGNOSIS

The initial concern in the management of refractory VT should be precise diagnosis and differentiation from its mimics, i.e., supraventricular tachycardia (SVT) with aberrant intraventricular conduction (Figure 1), SVT with antecedent bundle branch block (Figure 2) and SVT with persistent anomalous conduction as in the Wolff-Parkinson-White (WPW) syndrome (Figure 3). Adequate differential diagnosis is often difficult but crucial because "membrane-depressant" drugs such as lidocaine, procainamide and quinidine tend to accelerate the ventricular response in SVT while abolishing most episodes of VT.[1] The diagnosis of VT is suggested by the appearance of three or more successive QRS complexes that are abnormal in contour and duration and the identification of a slower, independent atrial activity. The ventricular rhythm is usually somewhat irregular, and the rate is generally between 140 and 250 per minute. In my experience, real VT is rarely precisely regular, and the rate almost never exceeds 300 per minute. This is in contradistinction to SVT where monotonous regularity and very rapid rates are common. With the lone exception of SVT with persistent WPW anomalous conduction, the diagnosis of VT is clinched by the identification of "capture beats" (QRS complexes of normal duration and contour derived from supraventricular impulses) or "fusion beats" representing QRS complexes of both ectopic and sinus origin (Figure 4). Unfortunately, "captures" and "fusions" occur infrequently and cannot be relied upon for consistent diagnosis. His bundle electrograms, while invasive, can be useful in differentiating VT from SVT. In SVT, His bundle potentials precede QRS complexes with a normal or prolonged H-V interval, while in VT, the His potentials occur after the onset of QRS.[2]

SEARCH FOR THE CAUSE

Once the diagnosis of VT is correctly established, the next step should be a thorough search for clues to the origin of the arrhythmia. While instances of VT in different patients may be indistinguishable electrically, the clinical settings can vary markedly. This, of course, is the basis for the popular caveat, "We never treat arrhythmias, only patients with ar-

*Dr. Rothfeld is Director of the Heart Station and of the Coronary Care Unit of Newark Beth Israel Medical Center, and Associate Professor of Medicine at New Jersey Medical School, CMDNJ. He is a consultant to the editorial staffs of the *American Journal of Cardiology* and of the *Journal of the American College of Chest Physicians*. Correspondence may be addressed to him at the Medical Center, 201 Lyons Avenue, Newark, N.J. 07112.

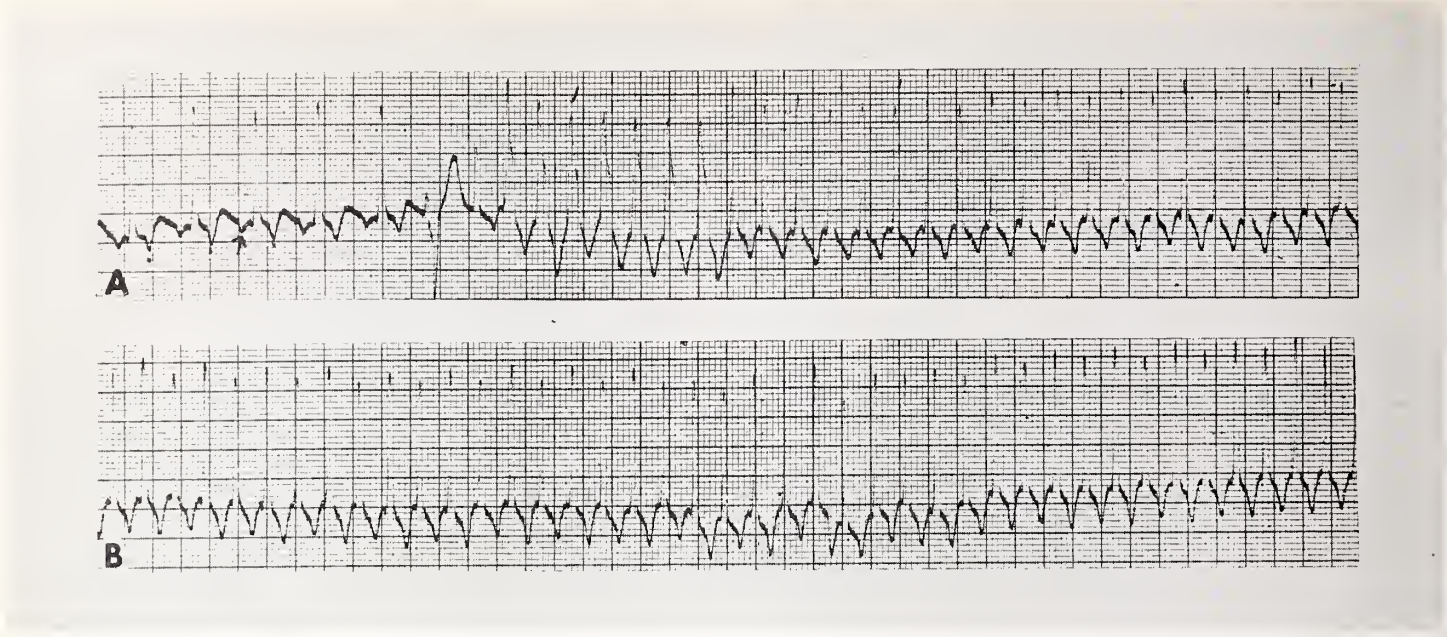


Figure 1—Strips A and B are a continuous recording of lead II that initially shows atrial flutter with 2:1 atrioventricular block. After the fifth QRS, the block suddenly is dissipated giving rise to aberrant intraventricular conduction that simulates VT.

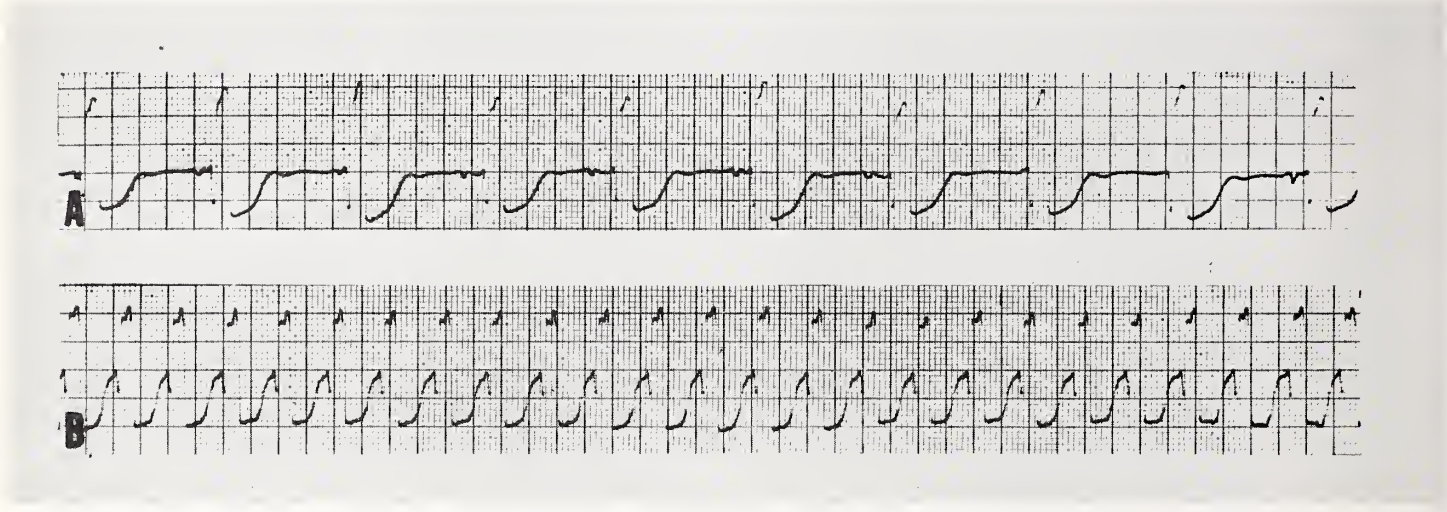


Figure 2—Strips A and B were obtained on different days from the same patient. Strip A shows normal sinus rhythm with right bundle branch block, while B reveals SVT with the identical QRS abnormality mimicking VT.

rhythmias!" Congestive heart failure often is overlooked as a cause of VT; in these patients, digitalis and other anti-congestive measures will effect a "cure" while membrane-depressant drugs usually fail. Similarly, VT due to blood gas abnormalities or electrolyte derangements, such as hypokalemia, are treated best by correction of the underlying defect. VT may be a consequence of a conduction defect where ideal therapy is an electrical pacemaker or a cardio-accelerator drug. A special form of VT, designated "torsade de pointes," is characterized by polymorphous QRS complexes and marked QU prolongation in sinus impulses.[3] Any situation that causes QU prolongation may engender this unusual mechanism, i.e., hypokalemia, stroke, variant angina, hypothermia, drugs like quinidine, procainamide and thioridazine, and the genetic "QU syndromes." Prompt recognition is mandatory because ventricular fibrillation quickly may supervene and because treatment with membrane-depressant drugs that cause further QU prolongation may prove disastrous.

TREATMENT

After adequate diagnosis and clinical assessment of the patient, three basic regimens are available for the management of ventricular tachycardia: pharmacologic suppression, electrical pacing or "cardioversion," and surgical ablation. The recent classification of Arnsdorf and Hsieh provides a logical approach for the use of drugs in VT based on electrophysiologic concepts[4]:

Group I drugs (procainamide, quinidine, and disopyramide) reduce conduction velocity and sodium conductance.

Group II drugs (lidocaine and diphenylhydantoin) decrease conduction velocity by increasing potassium conductance as well as depressing sodium conductance.

Group III agents produce beta-adrenergic receptor blockade (propranolol, alprenolol and so on).

Group IV are anti-adrenergic drugs (bretylium) but the exact mechanism and locus of action remains unknown.

Group V drugs (verapamil) block slow-channel calcium depolarization and presumably disrupt re-entry channels.

I usually begin with intravenous lidocaine in a bolus of 100 mg. followed by a continuous infusion rate of up to four mg. per minute. Approximately 20 to 40 percent of instances of VT will not respond to lidocaine alone. I next add procainamide in a loading dose of 500 mg., followed by an infusion of up to four mg. per minute. The combined use of

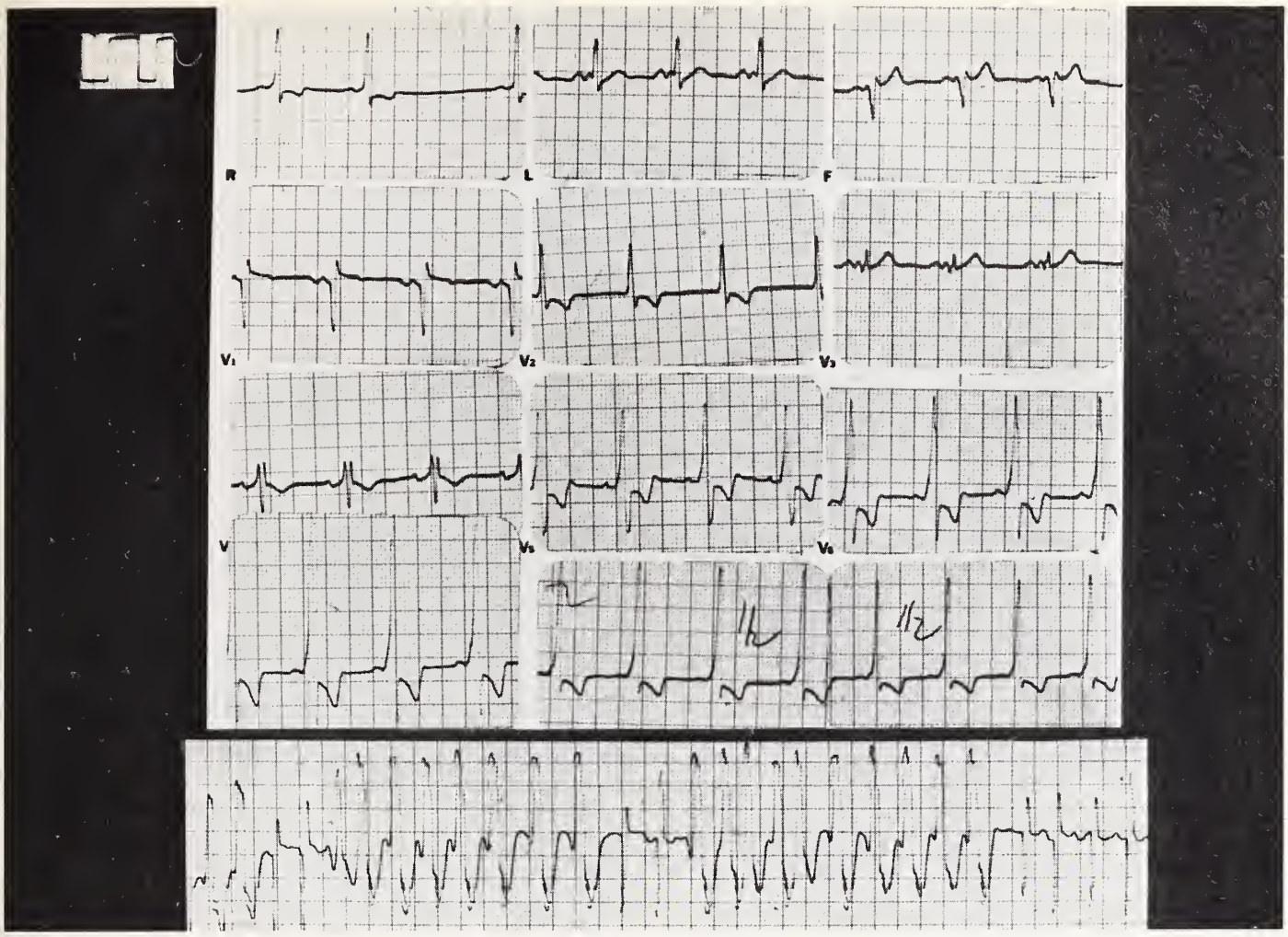


Figure 3—The 12-lead ECG shows normal sinus rhythm with WPW anomalous conduction, while the "rhythm strip" is atrial fibrillation with persistent anomalous conduction imitating VT.

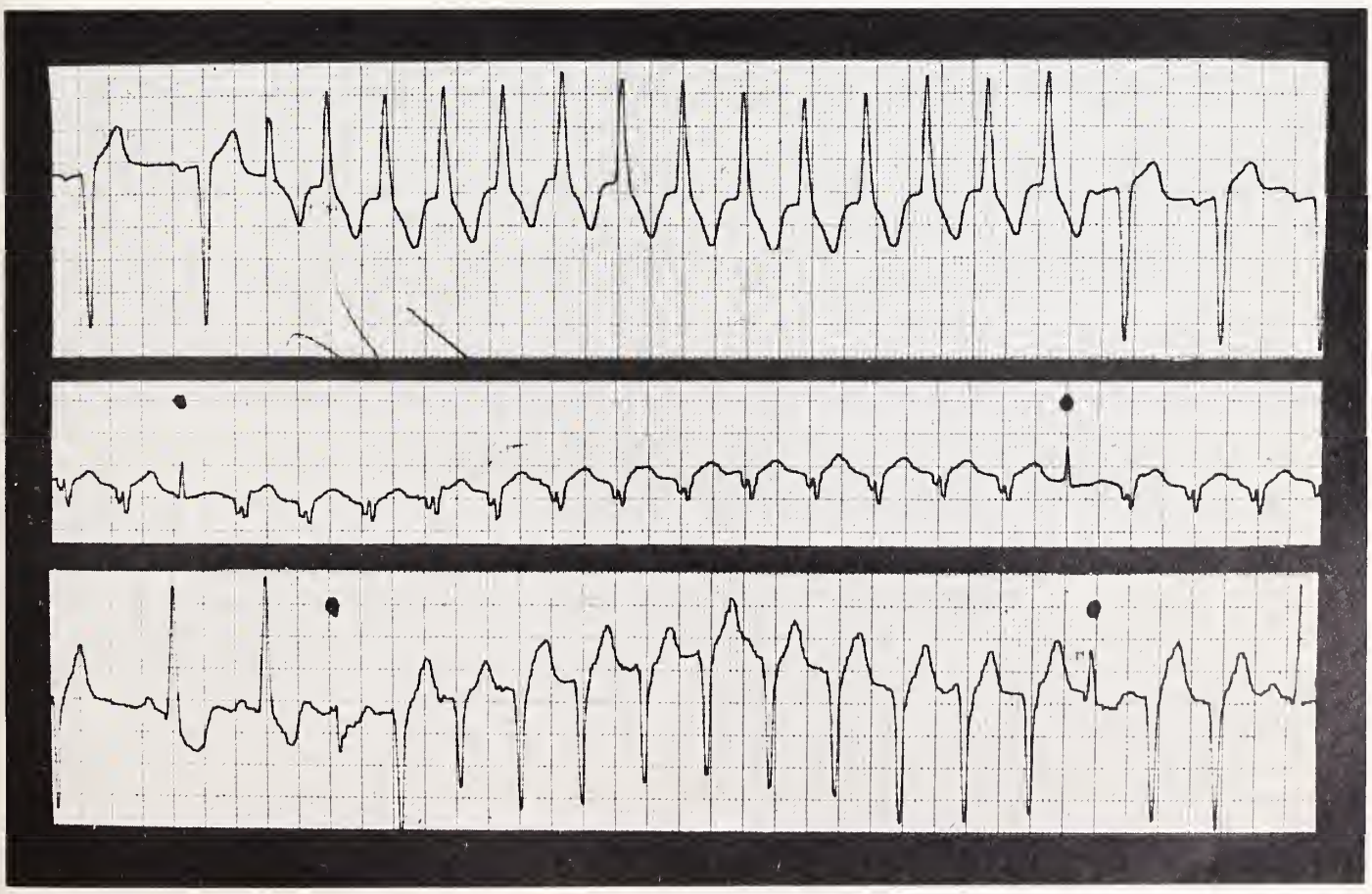


Figure 4—These strips represent leads VI (upper) and V6 (lower) in an elderly man with extensive, acute infarction. Each of the strips reveals a broad QRS tachycardia with a rate of about 150 and a slight degree of irregularity. Definite "capture beats" are indicated by the dots in lead II, and varying degrees of "fusion" are illustrated by the dots in V6.

"Electrical methods play a real but limited role in the management of VT."

a Group I and Group II drug may produce synergistic effects owing to their different effects on ionic fluxes. In my experience, Group III drugs given intravenously for VT have been mostly ineffective and sometimes hazardous. Group IV drugs like bretylium, while very effective in experimental preparations, have been disappointing in resistant ventricular tachycardia. Group V drugs, calcium antagonists, seem to be remarkably effective in re-entrant SVT, but have yet to prove their value in VT[5]. Newer agents like amiodarone, aprindine, ethmozin and mexiletine need more extensive clinical evaluation.

Electrical methods play a real but limited role in the management of VT. Direct-current electrical shock (DC cardioversion) is often remarkably effective in promptly abolishing VT, but the arrhythmia tends to recur because the cardioverter fails to eliminate the underlying cause. Electrical pacing has received "mixed reviews" in VT. "Underdrive" pacing (in the presence of conduction disease) is remarkably effective in preventing VT because untreated bradycardia often engenders tachycardia. On the other hand, "overdrive" suppression (the delivery of critically timed stimuli designed to disrupt re-entrant circuits) has disappointed most of us.[6]

Finally, a variety of surgical procedures has been developed for the treatment of refractory ventricular tachycardia: aneurysmectomy, encircling ventriculotomy, infarctectomy, cryosurgical ablation of the focus of origin, endocardial resection, sympathectomy and coronary arterial bypass grafting. Most of these operations aim at removing or interrupting a re-entrant circuit that is localized by endocardial mapping at the time of catheterization or by epicardial mapping during the surgery itself.[7] Critical evaluation of these heroic measures still is not available, and surgery should be reserved, of course, for VT that is truly refractory.

SUMMARY

In summary, refractory ventricular tachycardia remains a bête noire for most cardiologists. The current "State of the Art" suggests:

Step 1: Make sure the arrhythmia is VT and not one of the SVT masqueraders.

Step 2: Attempt to establish the cause—congestive heart failure, abnormal blood gases, electrolyte errors, underlying conduction disease, torsade de pointes, and iatrogenic effects and wherever possible, treat the cause rather than the arrhythmia per se.

Step 3: Begin pharmacologic suppression with lidocaine and/or procainamide in large doses as described above.

Step 4: Initiate electrical pacing in an attempt to disengage re-entrant circuits.

Step 5: If all of the above has failed, and electrical or mechanical deterioration is evident, surgery must be considered. In my opinion, operation should be performed only in association with careful endocardial and epicardial mapping of the offending focus or re-entrant circuit.

REFERENCES

1. Marriott HJ, Bieza CF: Alarming ventricular acceleration after lidocaine administration. *Chest* 61:682, 1972.
2. Wellens HJJ, Bar FWHM, Lie KI: The value of the electrocardiogram in the differential diagnosis of a tachycardia with a widened QRS complex. *Am J Med* 64:27, 1978.
3. Rothfeld EL, Atherley T: Torsade de pointes. *J Med Soc NJ* 76:847, 1979.
4. Arnsdorf MF, Hsieh YY: Antiarrhythmic agents. In: *The Heart,* 4th edition, eds: Hurst, Logue, Schlant and Werger. New York, McGraw-Hill, 1978, p. 1943.
5. Zipes DP, Troup PJ: New antiarrhythmic agents. *Am J Cardiol* 41:1005, 1978.
6. Denes P, Wu D, Dhingra RC: Electrophysiological studies in patients with recurrent ventricular tachycardia. *Circulation* 54:229, 1976.
7. Kastor JA: How should refractory ventricular tachycardia be treated? *Am J Cardiol* 44:1213, 1979.

THERAPEUTIC DRUG INFORMATION

This information is compiled by the Schwartz Inter-National Pharmaceutic and Therapeutic Drug Information Center of the Arnold and Marie Schwartz College of Pharmacy and Health Sciences, Long Island University.*

Do you have information regarding the use of choline and lecithin in the treatment of tardive dyskinesia?

Tardive dyskinesia is a disfiguring disorder characterized by involuntary twitches of facial muscle. These include rolling tongue movements, lip smacking, lip puckering and rapid eye movements.[1] One form of tardive dyskinesia typically occurs in susceptible individuals after chronic ingestion of antipsychotic agents and usually continues indefinitely even after discontinuation of the offending drug(s). The syndrome may result from an imbalance between dopamine and acetylcholine in the basal ganglions resulting in deficient cholinergic tone. Drugs that reestablish the dopamine/acetylcholine balance by either lowering dopamine or raising acetylcholine may reduce symptoms of this movement disorder syndrome.[2] Choline and lecithin (a dietary source of choline) have been shown to increase brain-tissue levels of choline and acetylcholine in animals and increase choline levels in cerebrospinal fluid of man.[3] This suggests that these substances may be of value in the treatment of this syndrome.[3]

Early reports by Davis *et al.*[2,4] support the inference that choline administration may be useful in treating tardive dyskinesia. Growdon *et al.*[3] gave pharmacological doses of choline to patients with tardive dyskinesia in an attempt to suppress involuntary facial movements. Twenty patients received oral doses of choline for two weeks according to a double-blind crossover protocol. Plasma choline levels rose significantly and choreic movements decreased in nine patients, worsened in one, and were unchanged in ten. Choline therapy didn't interfere with the action of antipsychotic drugs. These results were confirmed by other investigators.[5]

Although choline may be useful in treating some cases of tardive dyskinesia, it also may cause severe depression and imparts a strong, fishy odor[5,6]. Lecithin preparations do not cause patients to develop this odor but do have the disadvantage of varying markedly in their pure lecithin content from manufacturer to manufacturer making it difficult to ascertain the proper therapeutic dose. Presently available lecithin preparations must be consumed in large quantities to achieve a therapeutic effect with daily doses containing as much as 700 calories.

In conclusion, the acetylcholine precursors, choline and lecithin, appear useful in the treatment of some forms of tardive dyskinesia.

REFERENCES

1. Jackson I V: Cholinergic enhancement in tardive dyskinesia. *Curr Therap Res* 24: 725-733, 1978.
2. Davis K L, *et al:* Choline for tardive dyskinesia. *N Engl J Med* 293:152, 1975.
3. Growdon J H *et al:* Oral choline administration to patients with tardive dyskinesia. *N Engl J Med* 297:524-527, 1977.
4. Davis K L *et al:* Choline in tardive dyskinesia and Huntington's disease. *Life Sci* 19:1507-1516, 1976.
5. Kolata G B: Mental disorders: A new approach to treatment? *Science* 203:36-38, 1979.
6. Tamminga C *et al:* Depression associated with oral choline. *Lancet* 2:905, 1976.

Do you have any information on SQ 14,225 for the treatment of hypertension?

Captopril (Capoten, SQ 14,225) is an orally active inhibitor of angiotensin-converting enzyme currently under Phase III investigation by Squibb for the treatment of hypertension.

In the renin-angiotensin system, which participates in the regulation of blood pressure, converting enzyme in the lungs acts upon angiotensin I to form angiotensin II. Angiotensin II is the most potent vasopressor known. Blockade of angiotensin conversion by captopril eliminates formation of this potent vasoconstrictor.[1] A decrease in angiotensin II also reduces the secretion of aldosterone resulting in increased sodium excretion. In addition, blockade of converting enzyme leads to effects not involving the renin-angiotensin system including the accumulation of bradykinin, a local vasodilating hormone.

Brunner *et al.*[2] assessed captopril in 22 patients with essential hypertension, renovascular hypertension, or hypertension associated with chronic renal failure. Blood pressure was lowered in all patients including those with low renin levels. The antihypertensive effect occurred rapidly and blood pressure remained well controlled on long-term maintenance therapy with maximum oral doses of 200 mg twice daily.

*The Center serves as a source of intelligence on therapeutic and pharmaceutic information not readily available to physicians, at no charge to them, and provides this information with minimal time involvement. It is staffed by trained pharmacists: Jack M. Rosenberg, Pharm. D., Associate Professor and Chairman, Division of Clinical Pharmacy, Arnold and Marie Schwartz College of Pharmacy and Health Sciences, is Director and Walter Modell, M.D., Emeritus Professor of Pharmacology at Cornell University Medical College, is pharmacologist consultant. The service is available Monday through Friday from 9 a.m. to 5 p.m.—telephone (212) 622-8989 or 330-2735. Responses to these questions were prepared by J.M. Rosenberg, Ph.D., Pharm D.; T. Chin, Pharm. D.; N. LaBella, R.Ph.;S. Kaplan, R.Ph.

Gavras *et al.*[3] investigated the antihypertensive effect of captopril from three to 24 weeks in 12 hypertensive patients who had essential hypertension, renovascular hypertension, and hypertension with or without azotemia. Blood pressure decreased in all patients with oral doses ranging from 400 to 1000 mg daily including subgroups with high, normal and low renin. Small increases in plasma potassium were noted which may have resulted from enhanced renal reabsorption of potassium from hyposecretion of aldosterone. Small increases in pulse rate were observed which may have been attributed to reflex sympathetic stimulation as a response to the decrease in blood pressure.

Lopez-Ovejero *et al.*[4] have reported positive results utilizing captopril to manage the vascular and renal crisis of scleroderma which appears to involve renin-induced vasoconstriction.

Davis *et al.*[5] demonstrated that captopril was useful in the treatment of chronic heart failure. The renin-angiotensin system is thought to maintain elevated systemic vascular resistance in this condition.

Generally, side effects of captopril have been minor. The most significant adverse effect is an impressive incidence of rashes, occasionally associated with fever.[6] There is also one case of acute renal failure reported to be associated with this therapy.[7]

In conclusion, captopril is an orally active inhibitor of angiotensin-converting enzyme and represents a new and effective agent for the treatment of hypertension. It also may be of value in other conditions where the renin-angiotensin system is involved in increased vascular resistance. Barring no unforeseen complications, the drug is expected to be submitted for FDA approval this Fall.

REFERENCES

1. Ferguson R K *et al:* A specific orally active inhibitor of angiotensin-converting enzyme in man. *Lancet* 1:775-778, 1977.
2. Brunner H R *et al:* Oral angiotensin-converting enzyme inhibitor in long-term treatment of hypertensive patients. *Ann Intern Med* 90:19-23, 1979.
3. Gavras H *et al:* Antihypertensive effect of the oral angiotensin converting enzyme inhibitor SQ 14225 in man. *N Engl J Med* 298:991-995, 1978.
4. Lopez-Ovejero J A *et al:* Reversal of vascular and renal crises of scleroderma by oral angiotensin-converting-enzyme blockade. *Med Intel* 300:1417-1419, 1979.
5. Davis R *et al:* Treatment of chronic congestive heart failure with captopril, an oral inhibitor of angiotensin-converting enzyme. *N Engl J Med* 301:117-121, 1979.
6. Anon: Capoten proteinuria experience. *F-D-C Reports*—"The Pink Sheet" 41:7, May 7, 1979.
7. Anon: Reversible renal failure during captopril treatment—first report. *Inpharma,* No. 194, July 7, 1979.

3. Do you have any information regarding the value of cyclandelate in diabetic retinopathy?

Vascular deterioration is a common complication of diabetes mellitus, and retinal changes have been observed in 90 percent of diabetes with 15 years of clinical disease.[1] Vascular hemorrhaging, associated with microaneurysms, may produce scar tissue formation and lead to retinal detachment.[2] It has been proposed that these microaneurysms may result from hypoxic injury.[3] Thus, drugs which may reduce hypoxia possibly have a role in decreasing vascular complications of diabetes mellitus.

Cunha-Vaz *et al.*,[4] in a controlled double-blind study compared cyclandelate (sold as Cyclospasmol®) to placebo in preventing diabetic retinopathy. Six diabetic men and 16 diabetic women with no history of eye disease or evidence of retinal lesions participated in this trial. A dosage regimen of either cyclandelate 400 mg or placebo was given four times a day for a three-month period. Each person was assessed four times using fluorescein penetration as a measure of the permeability of the blood retinal barrier. Interpretation of data suggests that during the first two months, a progressive increase in permeability of the blood retinal barrier occurred in both groups. However, during the third month, the cyclandelate-treated subjects showed improvement in abnormal blood vessel permeability.

In conclusion, further studies are needed to determine if cyclandelate or other drugs which may protect against hypoxic injury would be beneficial in reducing retinal vascular complications associated with diabetes.

REFERENCES

1. Anon: *Textbook of Medicine,* 15th edition. Philadelphia, Saunders, 1979, p. 1976-1977.
2. Anon: *Harrison's Principles of Internal Medicine,* 7th edition. New York, McGraw-Hill, 1975, p. 547-548.
3. Ditzel J and Standl E: *Acta Medica Scandinavica,* Supplement, 1975, p. 578-579.
4. Cunha-Vaz JG *et al:* Treatment of early diabetic retinopathy with cyclandelate. *Br J Ophthal* 61:399-404, 1977.

PEDIATRIC BRIEFS

Selected Abstracts with Comments *

Delbanco TL, et al: The periodic health examination: 1980. *Ann Intern Med* 92:251, 1980. **Fletch SW, et al: Approach of the Canadian Task Force to the periodic health examination.** *Ann Intern Med* 92:253, 1980.

These two editorials discuss a Canadian study (*Can Med Assn J* 121: 1193, 1979) on value of periodic health examinations. This study graded procedures according to valid evidence which supported their being done in asymptopmatic persons. For all adults: measurement of BP, mouth examination, hearing examination, immunizing against tetanus; for persons > 45 add stool for occult blood; for women add contraceptive counseling, breast examination, and Pap smear. The complete physical does *not* appear as a recommendation. No blood chemistries are advocated. Routine urine (except in pregnancy), EKG, or hemoglobins are not recommended for asymptomatic persons.

It is likely that ". . . much of the technologically based billing we generate in our offices may prove unwarranted . . we must abolish [financial] incentives that interfere with the rational practice of medicine."

Comment: The Canadian study is an extension of Frame and Carlson's work (*J Fam Pract* 2:29, 123, 189, 283, 1975) on screening. The results of these and other studies (especially in children by Anderson in 1969 and Hoekelman in 1975) all reach similar conclusions. Some types of health screening are overdone, often because of the fee-for-service incentive. The American Academy of Pediatrics continues to recommend 32 child health visits during childhood (to age 18) while the study of Hoekelman recommends only ten with some being performed by the physician extender. We need to be more selective with our services.

Fiellau-Nikolajsen M, et al: Prospective tympanometry in three-year-old children. *Arch Otolaryngol* 105:461, 1979.

Three-year-olds with abnormal tympanograms were followed for six months. The type associated with middle-ear fluid (B) converted to normal spontaneously (no treatment) in 50 percent of girls and 25 percent of boys. Spontaneous improvement must be taken into account in assessing therapy of middle-ear effusions.

Comment: The current status of treatment of effusions is unclear. Decongestants are of no value or harmful. Tubes work but require much attention and may lead to long-term detriment. One simple method is observation, especially if the child already speaks well and/or has only one ear involved. If the problem resolves spontaneously much has been gained.

Ginsberg CM et al: Cefaclor and Cefadroxil. *J Pediatr* 96:340, 1980.

Cefaclor is effective against pneumoccocci and H. influenzae (B lactamase + or). It has been effective for middle-ear infectons. Cefadroxil is almost identical to cephalexin and might be considered for treatment of UTI due to susceptiable organisms. "No orally administered cephalosporin should be used initially for therapy of suspected or proved H. influenzae *type b* disease because invasion of the blood stream and CNS occurs in a substantial percentage of infants . . . physicians . . . must not yield to unsubstantiated (advertising) claims . . . those antibiotics that have stood the test of time and with which physicians have the greatest experience are preferred for most infectious diseases. The cost to the patient . . . must be considered . . ."

Comment: Amen.

Dagan R: Lactose-free formulae for infantile diarrhea. *Lancet* 1: 207, 1980

Moderately dehydrated non-malnourished children under one year of age admitted to the Beersheba, Israel hospital were fed either cows' milk formula (lactose) or soybean formula (lactose-free) after 6 to 24 hours of IV fluids. Children fed cows' milk had a significantly longer course.

Comment: Lactose malabsorption follows gastroenteritis probably universally. Whether this matters depends upon the previous state of nutrition, the age, and the degree of lactose intolerance. This study demonstrates that interdiction of lactose soon after gastroenteritis may be valuable. Others have shown that soybean protein has its own disadvantages. We use protein hydrolysate formulas for infants immediately post gastroenteritis. The evidence varies but we believe it is prudent.

Nolte MT: Intravenous immunoglobulin therapy for antibody deficiency. *Clin Exp Immunol* 36:327, 1979.

Twenty patients with agammaglobulinemia were treated either with usual IM ISG or intravenous modified ISG (MISG). Levels of IgG were higher with MISG and the number of infections per month was significantly reduced.

*Abstracted from "Children's Hospital Newsletter," United Hospitals of Newark, Vol. 1, No. 11 (November 1979). Selections are made and original comments prepared by Richard H. Rapkin, M.D., Medical Director, and members of the medical and surgical staff.

Comment: These patients have had to suffer painful IM injections because no satisfactory IV preparation of ISG had been produced. This study and others now report a new product which works better and causes less distress. Commercial availability is pending. (Cutter Labs).

Bell SM et al: Mechanisms of ampicillin resistance in hemophilus influenzae from respiratory tract. *Lancet* 1:279, 1980.

One hundred consectuive specimens of H. influenzae were studied in Australia. Thirteen were resistant to ampicillin. Six of the 13 produced B lactamase as the mechanism of resistance. Seven did not produce this enzyme and were resistant by some other mechanism. The usual method of determining H. influenzae resistance to ampicillin is by B lactamase assay (disc sensitivity testing is unreliable for H. influenzae and ampicillin).

Comment: If this study is correct, and if evidence becomes available that this phenomenon is not localized to Australia, a new major problem will have developed. We currently use chloramphenicol for major H. influenzae disease until the sensitivity studies are done (B lactamase assay) and are negative, and then switch to ampicillin. There is, as yet, no reason to change policy, but this is a significanty worry.

Musher, DM, et al: Fever patterns: Their lack of clinical significance. *Arch Intern Med* 139:1225, 1979.

One hundred and two adults with enough data available to enable recognition of a fever pattern were evaluated. "Remittent" fever (fever each day never falling to normal) occurred most commonly, "intermittent" next (fever each day falling to normal each day). Both types have diurnal variation. This combined group accounted for over 80 percent of fevers. There was no relation between diagnoses and nature of fevers with two exceptions: 1) "hectic" fevers (defined as remittent or intermittent with diurnal variation of at least 2.5°F.) were more associated with bacteremias but there were many patients with hectic fever without bacteremia (50%) and some patients with bacteremia without hectic fever (25%); 2) "sustained" fevers (fluctuation less than 0.5°F.) were often associated with gram negative pneumonia or CNS damage. ". . . the fever pattern in most infected patients follows a diurnal variation . . . (this is) an exaggeration rather than an obliteration of the expected daily pattern . . . the release of pyrogenic substances into the blood stream is continuous; exaggeration of normal variation probably results because reactivity of the hypothalamus to these stimuli varies in accord with circadian rhythm."

Schmitt B.: Fever phobia. *Am J Dis Child* 134:176, 1980.

Eighty-one parents were surveyed. Most were unduly worried about low-grade fever. Most believed that moderate fever could cause serious neurologic side effects. Most parents treated fever aggressively giving antipyretics under 102°F and sponging before 103°F. The literature was reviewed to place these concerns in perspective—it was concluded that "the great concern of parents about fever is not justified."

McIntosh S, et al: Fever in young children with sickle cell disease. *J pediatr* 96:199, 1980.

One hundred eighty-two episodes of fever in 22 sicklers were studied. Six episodes of sepsis were documented and the height of fever was an indication of sepsis (103° or more): 10 percent of such episodes were associated with sepsis. 62 percent of patients with fever over 105° had sepsis.

Comment: Fever is an *indicator* of illness. In small children, in sicklers, and in other compromised hosts, the height of fever may correlate with the likelihood of sepsis. The danger of fever itself, however, has been overestimated. (Fever is probably valuable to survival since evolution has preserved it in most vertebrates.) Reduction of fever is important only if it is very high, especially if it results from inability to lose heat (heat stroke) or CNS dysfunction (encephalitis). Many patients with febrile convulsions convulse before they are recognized as febrile, and most (80 percent or more) have their seizure within 24 hours of fever onset.

Although there are major gaps in the literature my own opinion is that:

(a) The *cause* of fever needs assessment especially if it is high (more than 103°F) or if the child is young (less than 2) or compromised or if there is no "localization".

(b) Fever itself should be treated for the comfort of the patient. Patients are rarely significantly uncomfortable with temperatures under 103°F. Patients are not uncomfortable while asleep.

(c) Antipyretics therefore should rarely be used for fever under 103°F; sponging rarely for fever under 104°F.

(d) Alternating doses of aspirin and acetaminophen should never be used.

(e) Physicians should emphasize that fever is a valuable signal of disease and that vigorous attempts to reduce it may cause more harm than benefit.

Buchanan GJ, et al: Antibody responses to polyvalent pneumococcal vaccine in infants with sickle cell anemia. *J Pediatr* 96:264, 1980.

Eight infants (ages 9 to 28 months) received 14 valent pneumococcal vaccine (pneumovax). There were no untoward reactions and there was an antibody response to the majority of antigens. Because sepsis does occur in infants with sicklemia, and pheumovax may be helpful, it may be wise to give an initial dose between ages 6 to 12 months with a booster at two years.

Comment: The package insert says "not to be used under 2 years" but these authors believe that their regimen is unlikely to cause harm and may be beneficial. I agree.

Wells RJ et al: Pulmonary leukemia in children presenting as diffuse interstitial pneumonia (DIP). *J Pediatr* 96:262, 1980.

Open-lung biopsies were performed on 35 patients. Three (9%) of the patients with leukemia and DIP had pulmonary leukemia as the cause of the DIP. Sixty-six percent of DIPs had pneumocystitis: 11 percent had fungal disease.

Comment: Most leukemics with pneumonia (especially DIP) have pneumocystitis as the etiology and will respond rapidly to TMP-SMX. If they do not, diagnostic lung biopsy is warranted since another treatable cause of DIP may be found (e.g., pulmonary leukemia). Some physicians would biopsy initially, before a trial of TMP-SMX, to be more precise in diagnosis and permit early appropriate therapy to begin in the 34 percent who do no have pneumocystitis.

YOUR CONGRESSMAN SPEAKS

Federal Support for Health Programs

THE HONORABLE EDWARD J. PATTEN, Washington, D.C.*

As a Member of Congress, I have found that my most rewarding work over the past seventeen years has been my service on the Labor-HEW Subcommittee on Appropriations. As federal support for health programs has increased dramatically during the period, so have advances in all areas of health care. In the past two decades, our total spending as a nation for health care mushroomed from $27 billion to nearly $200 billion, and federal expenditures during that same period have risen from less than $1 billion twenty years ago to nearly $54 billion in the present fiscal year. Obviously, the federal share of health care costs has risen proportionately at a much higher rate than perhaps any other functional area of the federal government. In 1960 we spent approximately one in every twenty-seven dollars at the federal level for health care. In 1980, we expect that the federal share will be more than one in every four dollars.

What is the reason for such a great expansion of federal support, and what has this expansion meant for health care providers in the nation? In general, the 1960's and early 1970's saw a huge growth in new and existing health programs. The mid 1970's saw a slower growth due to Presidential vetoes and a move to control "excessive" federal spending in all areas. Since then, we have witnessed a refinement and further expansion of programs supported by federal funding, but with an increasing emphasis on control of costs and prevention of disease.

In these years, we have seen widening of support at the federal level for such programs as cancer and heart disease research, but we have also enacted a myriad of smaller support programs for research, treatment and prevention of hypertension, sickle cell anemia, sudden infant death syndrome, hemophilia, osteogenesis imperfecta and other less well-known afflictions. While I will not focus directly on allied health areas such as environmental protection, OSHA as a health protector, the Clean Air Act and the Safe Drinking Water Act, these and other similar legislative initiatives should be counted as a part of the federal impact on the health of our nation's people.

SIXTEEN YEARS OF FEDERAL HEALTH LEGISLATION

Allow me to touch on some specific changes I have seen in my Congressional career. My first year in Congress, 1963, brought great attention to several previously neglected areas of health care. In that year, we enacted the Community Mental Health Centers Construction Act, the Mental Retardation Facilities Construction Act and the Health Professions Educational Assistance Act. This last one was the first major piece of legislation to provide assistance to medical personnel and schools, and made federal loans and scholarships available for students of medicine, dentistry, optometry, osteopathy, pharmacy and veterinary medicine. The measure also provided construction grants for medical and nursing schools. This legislation, in my opinion, planted the seeds for the growth mentioned earlier.

The year 1964 was one of great expansion of the Hill-Burton Act and provided authorization of funds at $160 million for hospital construction. The same year, we enacted the Nurse Training Act in recognition of a national nursing shortage. This Act authorized a program of financial support to expand and improve nursing education, and the 1964 legislation rounded out our programs of support for facilities and personnel which had been sorely lacking.

The year 1965 could be termed that of the poor and aged. Medicare and Medicaid came into being, and the Older Americans Act was passed and signed into law.

The next year, passage of the Allied Health Professions Personnel Training Act further focused our attention on the needs of health care providers, and authorized grants to training centers of related health professions to improve health curriculums, to provide traineeships for advanced training and for development of methods of training new types of health technologists. For the first time in history, federal funds touched these supporting services and service providers such as nutritionists, therapists and dental hygienists—an important step toward the goal of excellence in medical care. In 1966 we also passed a comprehensive health planning measure through the structure of grants to states for this purpose.

The late 1960's brought the first Alcoholism Prevention and Treatment Program, the first Drug Abuse and Treatment Program and the first real federal emphasis on prevention of communicable diseases. These years also brought on discussions of not only the quality of medical personnel, but also of the gaps in service in certain areas of our nation. In 1970 the National Health Service Corps legislation was finalized, bringing with it incentives for the assignment of

*Congressman from the 15th District. He is a member of the House Committee on Appropriations and the Subcommittees on Labor/HEW and Treasury. He may be addressed at 2332 Rayburn House Office Building, Washington, D.C. 20515.

medical personnel to areas with critical medical manpower shortages.

Cancer research was the keynote in federal health care activities in the early seventies. In 1971, we enacted a $1.59 billion three-year program to advance the national effort to find a cure for cancer. This authorization over three years exceeded the total health care budget of our government for my first year in the Congress.

The seeds planted in the sixties blossomed in the early seventies through the enactment of Health Maintenance Organization legislation, the Emergency Medical Services Act and the Rehabilitation Act in 1973, the establishment of a biomedical research training awards program, legislation charging a new network of health planning agencies with the review of all proposed health services and health facilities, and enactment of some small but significant programs in the areas of sudden infant death, diabetes research and arthritis research, prevention and training programs in 1974, and the override of a Ford veto of two significant authorizations: the Nurse Training Act and the Health Services Act of 1975. This 1975 legislation included state formula grants, family planning grants, the expansion of community mental health centers, community health centers and migrant health centers, and provided capitation grants for nurse training and advanced training support.

While 1976 is probably best remembered by those interested in health care as the year of the swine flu mass immunization, perhaps the more significant program enacted that year was landmark legislation establishing the federal government's clear-cut power to oversee the safety and effectiveness of medical devices.

The years 1977 and 1978 saw the extension of major federal health programs such as health planning, biomedical research and health services. At the same time the Health Maintenance Organization legislation was changed to reflect the need for a more permanant structuring of the program. The End-Stage Renal Disease program was enacted, emphasizing home dialysis, special care facilities and the establishment of a transplant network. Health Care Research legislation to control health costs through better planning was enacted, and a National Health Care Research Center in our region located at the University of Pennsylvania has made significant inroads into the planning field since it opened its doors several years ago.

This past year, the House passed the Child Health Assurance Act which presently is awaiting Senate action.

Some of these programs have been a direct result of national awareness of serious medical problems. The return of thousands of Vietnam veterans experiencing drug-related health problems is an obvious case in point for the quick reaction of the Congress to the need for a Drug Abuse and Prevention Act. Threats of a national flu epidemic obviously spurred quick action on the mass immunization program in 1976. But far more of the health initiatives at the federal level grew in a more measured manner as the nation and the Congress realized what I have believed all along—that a person's health is perhaps his or her most precious right, and that the federal government's role in the promotion of its citizens' well-being must necessarily include a strong emphasis on health care.

THE HEALTH OF OUR PEOPLE

What has this increased federal effort meant for the health of our people? According to the Surgeon General's recent report on Health Promotion and Disease Prevention entitled *Healthy People*—

- If mortality rates for certain diseases prevailed today as they did at the turn of the century, almost 400,000 Americans would lose their lives this year to tuberculosis, almost 300,000 to gastroenteritis, 80,000 to diphtheria, and 55,000 to poliomyelitis. Instead, the toll of all four diseases will be less than 10,000 lives.
- We have seen other impressive gains in health status in the past few years:
- In 1977, a record low of 14 infant deaths per 1,000 live births was achieved.• Between 1960 and 1975 the difference in infant mortality rates for nonwhites and whites has been cut in half.
- Between 1950 and 1977, the mortality rate for children aged one to 14 was halved.
- A baby born in this country today can be expected to live more than 73 years on average, while a baby born in 1900 could be expected to live only 47 years.
- Deaths due to heart disease decreased in the United States by 22 percent between 1968 and 1977.
- During the past decade the expected life span for Americans has increased by 2.7 years. In the previous decade it increased by only one year.

These statistics, I believe, reflect in part, the impact that the federal budget increases have had on the health of our nation. In our own state of New Jersey we have experienced significant improvements in health care because of these federal dollars. Community Health Centers are important to thousands of people who could not, without them, afford even basic medical care. The same holds true with Community Mental Health Centers. The founding of the College of Medicine and Dentistry of New Jersey in 1970 added greatly to our state's stature in the health care field, and under the able leadership of Dr. Bergen, our first medical school in the state of New Jersey has expanded, diversified and provided thousands of students with an excellent medical education. As a bonus, the hospitals associated with the College have benefited from the most up-to-date knowledge and information in the field. The Alcohol Research Center at Rutgers—The State University, a federally funded project, is a leader in the field of alcoholism and alcohol abuse research, treatment and prevention. The Center produces a quarterly journal which includes both articles in the field of alcoholism, and abstracts of the most recent information and studies in the field. This journal is internationally known for its fine abstracting and retrieval system which makes these abstracts available to professionals around the world.

It is obvious to me that hospitals in New Jersey have made the greatest gains in the last ten years than in any other decade in history. Advances in medical technology, such as the introduction of CAT scanners, coupled with increased medical expertise at all levels has brought us to a point, as a nation, where we have the most outstanding health care services of any country in the world.

THE LEGISLATIVE PROCESS

While these gains in our state and nation have not been entirely attributable to federal involvement, I do believe that the care, concern and foresight of our government leaders has given significant impetus and support for this growth. It is not enough, however, to enact legislation authorizing and expanding national health care programs. The other side of the coin is the appropriations process, and my involvement as a member of the Appropriations Committee and that subcommittee having jurisdiction over most health ap-

propriations has been my greatest joy as a member of Congress. The federal budget process is a complex one, and words like rescission, deferral and continuing resolution are often as foreign to those off "the Hill" as medical technology is to us laymen.

Each year, the President submits a proposed budget to the Congress fifteen days after the convening of the new session. The budget is then reviewed by the Budget Committees of the House and Senate in an effort to set temporary, and then permanent goals for total federal expenditures in broad functional categories for the coming fiscal year. At the same time, the Appropriations subcommittees take on the more detailed task of examining each individual program supported by federal dollars, and it is up to these subcommittees to make specific recommendations as to the level of support. Authorizing legislation contains a ceiling amount for federal funding of the program authorized. The Appropriations legislation for each year can fund the program up to that ceiling, but it has the option to fund below or not at all. Therefore, annual oversight and examination of each program is necessary. My own Labor-HEW Subcommittee on Appropriations has jurisdiction over hundreds of federal programs and we hear testimony on all of them over a three month period immediately following the submission of the President's budget. We receive testimony from administration witnesses, other members of Congress who are concerned about particular portions of the budget, professionals in all fields of our jurisdiction and we also have the opportunity to hear from members of the public who have asked to testify. Once hearings are completed, the subcommittee meets to "mark-up" a bill for consideration by the full Committee and finally the full House of Representatives. This mark-up session deals with the budget in our jurisdiction on a program-by-program basis. We start with the administration's proposed figure and make changes based on the testimony heard. The full Committee traditionally approves the subcommittee's recommendation, and the bill is "reported" or printed in final form with an accompanying document explaining the rationale and sent to the floor of the House. The same process is going on simultaneously in the Senate, but since the Constitution charges the House of Representatives with initiating all fiscal matters for the government, the House must act first, and the House bill is the vehicle in both houses of the Congress.

In the Health portion of our budget, I have been active in assuring adequate support for the medical manpower legislation, in expanding our basic biomedical research support through the National Institutes of Health, and in assuring increased support for arthritis, epilepsy and diabetes research funding. I became interested in osteogenesis imperfecta and other bone diseases several years ago and have been successful in drawing federal attention to these afflictions through the insertion of committee report language emphasizing the Congress' desire to see increased research in this area.

SUMMARY

I have learned a great deal through my work on this Committee. I have had the benefit of excellent testimony by leaders in the field of medicine and health care. But perhaps most importantly, I have had the opportunity to work legislatively to achieve our common goal . . . the improvement and expansion of our health care delivery system. We have come a long way, but we still have far to go. By working together through our own fields of expertise, I believe that we will reach that goal of promoting and assuring the health of our people.

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

This is not an easy time for her to stop smoking.

But it's not a good time for her baby to start.

The facts are in.

FACT: Women who smoke during pregnancy have smaller and lighter weight full term babies.

FACT: Their babies have more respiratory problems during the first critical years.

FACT: The incidence of stillborn infants and neonatal deaths is significantly greater.

FACT: The fetal oxygen supply is significantly reduced—the carbon monoxide in the blood significantly increased. There's more. Much more. Discuss the smoking hazard with your patients who are pregnant or planning a pregnancy. It may not be an easy time to quit smoking. But it's the right time.



U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office on Smoking and Health
Public Health Service Rockville, MD 28057

DOCTORS' NOTEBOOK

Trustees' Minutes March 16, 1980

A regular meeting of the Board of Trustees was held on Sunday, March 16, 1980 at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Orthomolecular Treatment—S-299, S-300, and S-301 . . Approved a recommendation to concur in the Council on Legislation's recommended position of ACTIVE OPPOSITION to S-299, S-300, and S-301, which call for the inclusion of orthomolecular treatment under health insurance contracts. The reason for the Council's recommendation is that the treatment regimented is not predicated on a scientific basis.

Financial Statements . . . Reviewed MSNJ's balance sheet, statement of revenue and expenses, and analysis of expenses, and the statement of revenue and expenses for *The Journal,* MSNJ, as of January 31, 1980.

Membership . . . Noted that paid membership through March 6, 1980 was 6,343. More than 80 percent of the 1979 membership has paid 1980 dues.

Livingston vs. Medical-Surgical Plan, et al. . . . Noted, in reference to the Livingston vs. Medical-Surgical Plan litigation (see *JMSNJ* 77:295, April 1980), that at the show-cause hearing on March 6, it was agreed to allow the Society additional time to file a response. The retained counsel will prepare a motion for summary judgment on the theory that the Medical Society is not a proper party and lack of jurisdiction.

Support for Physician Litigation . . . Noted that in litigation involving the State Board of Medical Examiners, in the case of a handicapped physician no longer in New Jersey, who had been fined and had his license revoked without determination of damages and who had appealed to MSNJ for support, discussions have been held with the senior officers within the Attorney General's office and there is a possibility that an amicable settlement may be reached.

MIIE Subordinated Loan Agreement . . . Noted in regard to the IRS subpoena for MIIE information, which was inappropriate, that Mr. Maressa met with Tax Counsel who will file a class action on behalf of the physicians who paid the subordinated loan monies. Prospects for a favorable decision look promising.

. . . Noted (in the case of a physician going through audit who is told he must pay on the subordinated loan money) that when IRS knows litigation is involved, the particular item being contested usually is held in abeyance. However, it is understood that individual auditors are refusing to allow the issue to remain open and are demanding payment. If this ultimatum is given, the physician should make payment and file for a refund, if and when a favorable decision is received on the litigation.

CMDNJ . . . Received as informative a written report from the College of Medicine and Dentistry of New Jersey which called attention to a matter connected with the South Jersey medical education plan—on April 20, 1979 an ad hoc committee of the Department of Higher Education recommended that a $9 million bond appropriation be allocated for a medical education facility in the Camden area to serve both allopathic and osteopathic students. Since then, the Dean of the CMDNJ School of Osteopathic Medicine has asked that $5.6 million of the appropriation be allocated to the Osteopathic School for the purchase and renovation of a building in Stratford, near the John F. Kennedy Hospital. The Department of Higher Education supports the original recommendation of the ad hoc committee. A final determination is to be made in the next two months.

MSNJSA . . . Received a report from the Medical Society of New Jersey Student Association which revealed that membership has remained constant; that student members had expressed interest in attending MSNJ's Annual Meeting; that the School of Osteopathic Medicine would like to meet with the MSNJ Student Association this spring; and that one of the services of the Student Association—the provision of an examination file from previous years—has been taken over by the Student Council which represents a loss of membership inducement and a replacement is being sought.

Division of Medical Assistance . . . Accepted a substitute resolution offered by the Executive Committee for the resolution offered by the Committee on Medicaid (*JMSNJ* 77:213, March 1980):

Whereas, the Division of Medical Assistance and Health Services has an investigative branch which is empowered to review the files of providers and interview patients; and

Whereas, these reviews and interviews should be done in a positive and constructive fashion; now therefore be it

RESOLVED, that the Board of Trustees direct staff to suggest that the Division establish a protocol for those assigned to conduct investigations and interviews that will foster a positive environment; and be it further

RESOLVED, that the Committee on Medicaid continue to monitor the activities of the Division of Medical Assistance and submit regular reports thereon to the county medical societies.

Medical Staff Bylaws . . . Deferred indefinitely a suggestion from the Council on Medical Services that a committee be appointed to draft guidelines for medical staff bylaws. It was noted that the AMA conducts hospital medical staff/trustee workshops several times a year throughout the country, and a great deal of valuable written material is available.

Degree Designation on Licenses . . . Received as informative a report from the Ad Hoc Committee on Degree Designation (*JMSNJ* 77:212, March 1980), indicating that there appears to be support for the concept that the integrity of the

M.D. and D.O. degrees be maintained. There appears to be no procedure at present to transfer from one degree to the other. Evaluation by the State Board of Medical Examiners of the use of the term M.D. for equivalent degrees on licenses was deferred pending completion of litigation addressing this matter.

Emergency Medical Care . . . Accepted the seven New Jersey Emergency Medical Services Critical Care Task Force Reports as a point of departure for further study and refinement in the development of plans for an emergency medical care system in New Jersey, with the understanding that the reports are not final or regulatory in any way. The Executive Committee will review the recommendations requested by the Committee on Emergency Medical Care pertaining to each particular area of care covered in the task force reports, as well as the summary notes received from the New Jersey Hospital Association. These data and a statement with respect to the Society's position on this issue, which will be prepared for submission to the Department of Health, will be distributed to members of the Board of Trustees in early April.

Reapportionment of House of Delegates . . . Approved for submission to the 1980 House of Delegates the following resolution concerning reapportionment of the House of Delegates:

Whereas, several committees of the Medical Society of New Jersey have studied the size of the House of Delegates of MSNJ; and

Whereas, these committees have found that a reduction in the size of the House would facilitate a more efficient, thorough, and comprehensive presentation of issues; now therefore be it

RESOLVED, that the Committee on Revision of Constitution and Bylaws be instructed to prepare amendments to the Bylaws, limiting the number of elected delegates to 399, with each component society entitled to at least three delegates.

Specialty Society/Medical Student Representation in the House of Delegates . . . Approved for submission to the 1980 House of Delegates the following resolution concerning specialty society/medical student representation in the House of Delegates:

Whereas, the issue of specialty society and medical student representation in the House of Delegates has been urged by several committees of the Medical Society of New Jersey; and

Whereas, it will be necessary to amend both the corporate charter of MSNJ and the Society's Constitution and Bylaws; and

Whereas, the legislative charter must be amended before the Constitution and Bylaws can be amended; now therefore be it

RESOLVED, that the House of Delegates authorize the Board of Trustees to petition the New Jersey Legislature to amend the corporate charter to recognize the right of the Medical Society of New Jersey to include specialty and student representatives in the House of Delegates.

Uniformity of Treatment of MSNJ Members . . . Voted to reaffirm its position that all members should be considered equally, and in the case of those physicians with office locations in several counties, component societies should consider all MSNJ members located within their counties eligible for referral listings.

Note: The Morris County Medical Society takes exception to this opinion and feels that only members of its society should be eligible for referrals. Complaints have been received from individual members that component societies are not always treating physicians equally when handling requests for referrals.

Blue Shield Regulations . . . Referred Resolution #12 (1979 House of Delegates), which called for a change in Blue Shield regulations to allow participating physicians to receive fees from major medical carriers, to the Executive Committee for implementation of the intent of the Resolution.

Listing of Professional Society Membership in Telephone Directory . . . Voted to adopt a resolution from Middlesex County Medical Society requesting MSNJ to prevail upon the telephone companies of New Jersey to list a physician's professional membership in MSNJ and/or its component societies in the classified section of the telephone directory.

New Jersey Physician-Dentist Loan Redemption Program . . . Empowered the President to select individuals to be nominated for appointment to the Advisory Committee to assist the Chancellor of Higher Education in developing standards and criteria to be used in selecting participants in the New Jersey Physician-Dentist Loan Redemption Program whereby up to 85 percent of a graduate's eligible educational indebtedness will be redeemed by the State in return for three years of service in underserved areas of New Jersey.

Proposed Amendments to the Rules and Regulations Governing State Aid Under the Community Mental Health Service Act . . . Voted to support the New Jersey Psychiatric Association in its response to proposed amendments (which would delete the current text of subchapters one through twelve and replace them with new rules and regulations to meet state and federal guidelines for planning and development of community mental health and related social services) to N.J.A.C. 10:37, which the New Jersey Psychiatric Association believes will force hospitals and clinics to refuse federal and state dollars if they are to provide adequate medical treatment for the mentally ill. The New Jersey Chapter, in conjunction with the American Psychiatric Association, is considering legal intervention should the regulations be adopted.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

About a year ago, the staff of the Federal Trade Commission issued a report questioning physician "control" of Blue Shield plans, and also of open panel prepayment plans, including western-style full service Foundations for Medical Care (FMCs) and IPAs. The report expressed concern with physicians banding together to decide who should receive their services, who should render medical services, and what payment should be used. The FTC staff considers such arrangements anticompetitive. Naturally, there was great objection to their report on the part of organized medicine, Blue Shield Plans, FMCs, and IPAs. The report was not adopted by the full Commission, and it seemed that the matter would not be pursued. There has been much concern in Congress over the aggressive behavior of FTC in recent years. It writes its own regulations, conducts its own investigations, and issues its own sanctions and penalties. It thus has taken executive, legislative, and judicial functions unto itself, making it a superbureaucracy.

Matters such as this do not expire in Washington. The Federal Register of March 17, 1980, contains a notice from FTC, entitled: "Medical Participation in Control of Certain Open-Panel Medical

Prepayment Plans." It invites comments on what action the commission might take, one of which might be rule making. It says that the FTC has not reached any conclusion on the question of whether medical control or medical participation in control of any type of open-panel medical prepayment plan is a violation of Section 5 of the Federal Trade Commission Act. At what point, FTC asks, does physician participation in the control of open-panel medical prepayment plans by medical organizations pose a sufficient danger of anticompetitive effects that, on balance, it should be forbidden? In participating in the selection of plan board members, do physician organizations represent the interests of the medical profession as a whole, thus posing antitrust concern? The FTC staff is concerned that boards controlled by physicians will make decisions that perpetuate the physician organizations' interest. Some of the questions and concerns run contrary to the regulations of the Office of Health Maintenance Organizations, but that does not seem to bother the FTC. The activities of HMOs, FMCs, and IPAs are praised by one body (OHMO) as stimulating competition in health services. FTC staff thinks that FMCs and IPAs (but *not* closed panel HMOs) may be quite the opposite, because they may tend to stifle competition. Peer review activities of physician committees on fees, coverage, benefits, and quality assurance are looked at askance by FTC staff.

It seems ironic that legitimate efforts to improve accessibility, primary ambulatory care, and so on are viewed with concern when physicians are, or seem to be, the sponsors. The hope and belief here is that this latest attempt by FTC staff will be no more successful than their last try. All concerned should keep alert, however.

Another ghost of the past resurfaced recently. Those of you who remember the early days of PSRO development will recall the "new regs." These were Utilization Review (UR) regulations that were issued at Thanksgiving of 1974. Written into the same law (PL 92-603) that contained the PSRO laws, they were said to be in conformity with PSRO, and were to be operative on Medicare and Medicaid hospital cases until the PSROs came into operation. I recall spending a good deal of 1975 in dealing with these "new regs." Many meetings and conferences were held with the New Jersey Hospital Association, the Department of Health, the UR Coordinators, and others on how we should deal with these regulations. "Hot lines" for rapid communication were established. Finally, after the AMA won an injunction in July of 1975, they were withdrawn (I suppose that the FTC staff didn't like that, either). Subsequent versions were attempted in 1976, but withdrawn again in 1978. Well, guess what? They're back. The March 3, 1980, Federal Register contains proposed rules on Medicare and Medicaid Utilization Review. The notice says that there are 3,000 hospitals not covered by PSRO review. This is due, in part, to the time wasted in 1975 over these UR regulations. It's also due to the reduced budgets, which have prevented PSROs from including all the hospitals in their areas in the PSRO review system. The UR regulations again are said to parallel the PSRO regulations (if so, why are they necessary? It would seem to be more consistent to allow PSROs to cover their areas fully). I won't go into the details, but the review under "UR" will not be the responsibility of physician-controlled PSROs, and their focus will be entirely on cost saving, with little or no concern over quality measures. They are representative of the opinions of some in the Health Care Financing Administration who are skeptical of physician commitments to matters of medical necessity, appropriateness, efficiency, and quality. These regulations should be resisted.

These are examples of the kinds of information which NJFHCE keeps abreast of; we also have a collective memory of past efforts by those who would regulate every detail of medical practice. Copies of the FR notices referred to above may be obtained by contacting the Foundation office.

These are also examples of the frustrations to be encountered when dealing with bureaucracies. Participation of physicians in one or more programs is solicited by an office or bureau, but subject to suspicion by another. Legitimate concerns and problems concerning medical care should be addressed. Unfounded criticism should be answered. The need for continuing vigilance is obvious. NJFHCE will keep you advised of the legitimate concerns as well as the biases of the skeptics. Medicine should be prepared to meet both.

CMDNJ Notes*

Stanley S. Bergen, Jr., M.D.
President

(I have asked James Jones, M.D., professor and chairman of obstetrics and gynecology at CMDNJ-Rutgers Medical School, to serve as guest editor of this column. Dr. Jones writes of the "breakthrough" test for sickle cell anemia now being offered at the medical school. The procedure, which is the first clinical test to come out of recombinant DNA research, currently is being offered at only one other medical center, the University of California, San Francisco.)

In the autumn of 1978, Y.W. Kan and Andree Dozy reported on the antenatal diagnosis of sickle cell anemia. They described a mother and father, both of whom had sickle trait, and their 18-week "at-risk" fetus. The report was sparse, written in the passive voice, concerned with the technology and nowhere was the family named or even initialed or numbered.

But the substance of the paper far transcended its form. It was not concerned with the analysis of fetal blood; Kan and Dozy had analyzed fetal genes. They never touched the fetus; they "simply" extracted the fetal DNA from the amniotic fluid cells (which are all fetal) and isolated and analyzed the fetal β-globin genes. One was a normal β-globin gene, the other a β^s-globin gene. The fetus thus had sickle trait and not sickle cell anemia and this subsequently was proved by analysis of the newborn blood.

The technology of gene analysis is not simple and certainly not a technique that will be carried out in every hospital. It is exacting and demanding, and the resultant reading of the radioautograph that "sees" the β-globin genes is frequently as difficult to interpret as the subtlest of x-rays. Francesco Ramirez, Ph.D., assistant professor in the department of obstetrics and gynecology at the CMDNJ-Rutgers Medical School, utilizing this method has analyzed the β-globin genes from 22 "at-risk" fetuses. The intrauterine diagnosis of either a normal fetus, or a fetus with sickle trait or with sickle cell disease was possible in all but one fetus.

The β-globin fetal gene analysis is indicated in any pregnancy in which both mother and father have the sickle trait, or in which either partner has sickle cell disease and the other the trait. A small amount of blood is drawn from both parents and the abnormal genes are searched for. At the time of this writing,

we are capable of "seeing" the abnormal β^s-globin gene in about 70 to 80 percent of the population; however, it appears that this will be extended to 100 percent of the population in the very near future. If the abnormal β^s-globin gene is found in the parents then an amniocentesis is carried out and the molecular genotype of the fetus is determined.

The molecular genetics of the test are complex and not appropriate to describe in this short article. What is appropriate is to recognize that in most patients, the antenatal diagnosis of sickle problems can be carried out on a simple amniocentesis done early in the pregnancy. It is a rapid test, requiring no culturing of cells and the results are usually available within days. It seems to us that never again should there be a baby born in whom the diagnosis of sickle cell anemia comes as a surprise.

It is most appropriate to understand the implications of this method. Recognize that at the time of the amniocentesis for β-globin gene analysis the fetus is not even producing the β-globin hemoglobin chains. At this time the fetus is functioning on fetal hemoglobin which has Y-chains substituted for the β-chains. We are analyzing genes that are not yet expressed. This method allows for the diagnosis of a disease that is not yet a disease.

If that thought isn't impressive enough, then consider the size of a gene. I am writing this piece in a 727 shuttle flight from New York to Boston, an air distance of some 200 miles. If I stretched an individual's DNA to equal the distance from New York to Boston I would have traveled the length of a gene in the first 500 feet of the journey, 1,000 feet before the 727 even left the ground.

The physiologic packaging of DNA in the body is also most impressive. The DNA from only one human cell if stretched out completely, would extend for 70 inches. If all the DNA were removed from an adult it would weigh only about a quarter of a pound (100 gms.) but it would reach 100 times the distance from the earth to the sun. One staggers from the sheer size of the amount of DNA we have but the information encoded in our DNA is the entire basis upon which our body functions and reproduces.

Sickle cell disorders are only the first of a whole cornucopia of genetic imperfections that will be diagnosable using gene analysis. The thalassemias are probably next and then the genetic collagen disorders; and then . . . select a gene, probably any, spend enough time, enough money, enough energy, and it will be readable.

One of the most troublesome thoughts I think I ever thought, is that in five, maybe ten years, each pregnant woman will have an amniocentesis and be presented with a list of analyzed fetal genes. She'll scan the list, select and decide. Perhaps 20 years from now she'll not only read the genes, but even insist that some be repaired, suppressed, or altered. As troublesome as this thought is, gene analysis is a technology whose time has come. If our current ethics abhor these clinical potentials, at least this research into the origins of being raises the whole adventure from a dangerous farce into the gracefulness of a tragedy.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Mohammed Mushtaque, M.D., 183-11 Hillside Ave., Apt. 11-K, Jamaica, NY 11432. Dow (Pakistan) 1975. Board eligible. Group, solo, or institutional. Available July 1980.

Narciso J. Samuy, M.D., 1180 East and West Road West, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Group or partnership. Available July 1980.

DERMATOLOGY—Ellen Blank, M.D., 1675 York Avenue, New York, NY 10028. Mt. Sinai 1975. Board certified. Any type practice. Available June 1980.

Karen Kade, M.D., 38 Fidelity Court, Carrboro, NC 27510. Albert Einstein 1976. Board eligible. Multi-specialty group. Available August 1980.

FAMILY PRACTICE—Kuchibhotla M. Krishna, M.D., 4309 West 95th Street, Apt. #23, Oaklawn, IL 60453. Andhra (India) 1970. Clinic practice or hospital-based practice without calls or weekends. Available January 1981.

GASTROENTEROLOGY—Michael F. Fina, M.D., 134 North Street, Apt. 7, Newtonville, MA 02160. New York Medical College 1975. Also, general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

Abbasi Akhtar, M.D., 333 East Ontario Street, Apt. 1512-B Chicago, IL 60611. Liaquat (Pakistan) 1966. Also, general internal medicine and pediatric gastroenterology. Board eligible. Any type practice. Available September 1980.

GENERAL PRACTICE—Gregory A. Pistone, M.D., 2018 High Street, Haddon Heights 08035. Pennsylvania State 1979. Board eligible. Student health/adolescent medicine, pharmaceutical, ER, house physician. Available July 1980.

James Walter Warren, M.D., 67 Welton Street, New Brunswick, NJ 08901. Meharry 1973. Also general internal medicine. Any type practice. Available.

HEMATOLOGY/ONCOLOGY—P.S. Bala, M.D., 882-6 Clifton Court Circle, NE, Atlanta, GA 30329. Calicut (India) 1965. Board eligible. Any type practice. Available July 1980.

INTERNAL MEDICINE—Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, cardiovascular diseases. Board certified. Group or partnership. Available July 1980.

Omprakash B. Ramani, M.D., 61-15 98th Street, Apt. 17-F, Rego Park, New York 11374. B. J. Medical (India) 1973. Board certified. Group or partnership. Available July 1980.

Stuart R. Schlanger, M.D., 105 North 31st Avenue, Omaha, NE 68131. Washington University 1977. Special interest, emergency medicine. Board eligible. Group or partnership. Available July 1980.

Richard Plotzker, M.D., 79 Holbrook Road, North Quincy, MA 02171. St. Louis University Board eligible. Group, clinic, institutional, or industrial. Available July 1980.

Khadar Baig, M.D., 2681 Arlington Drive, Apt. 303, Alexandria, VA 22306. Andhra (India) 1971. Subspecialty, gastroenterology. Board certified. Any type practice. Available July 1980.

Douglas R. Shumaker, M.D., 7861 Jefferson Street, Hummelstown, PA 17036. George Washington University 1977. Partnership, single or multi-specialty group, solo, emergency room. Available July 1980.

Joel M. Cohen, M.D., 1131 University Boulevard West. Apt. 1404, Silver Spring, MD 20902. SUNY-Downstate 1975. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, partnership. Available July 1980.

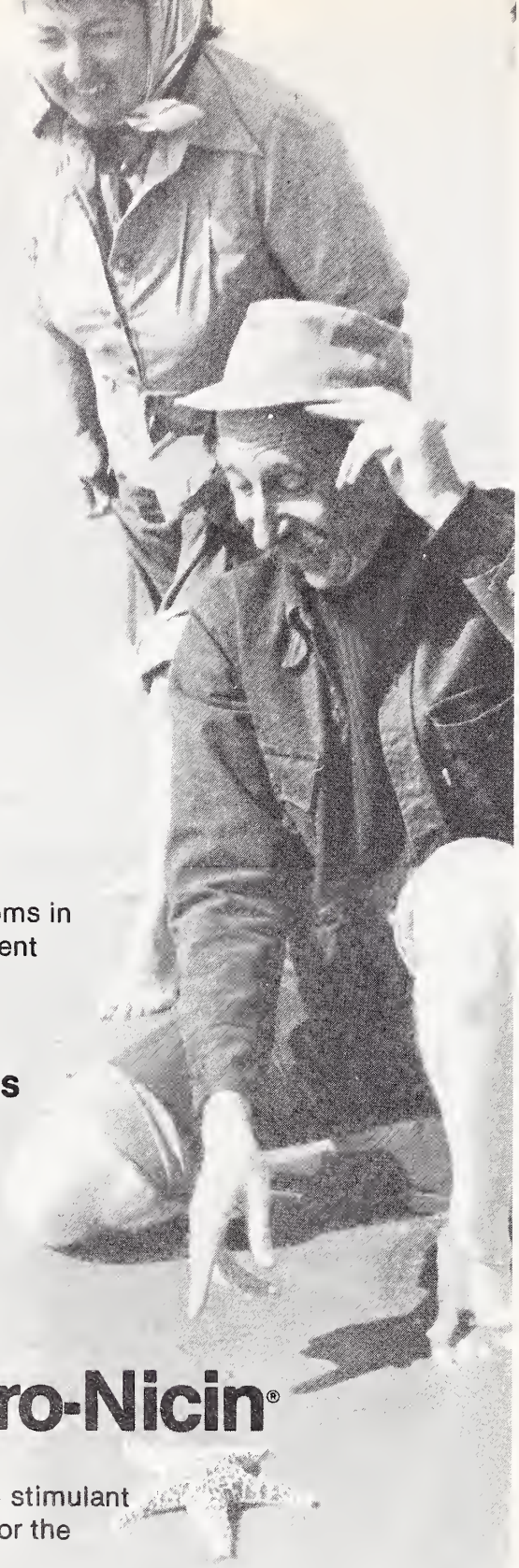
Sybil Kramer, M.D., 68 Winchester Street, Brookline, MA 02146. SUNY-Downstate 1975. Subspecialty, endocrinology. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Mark L. Friedman, M.D., 2901 S. King, Apt. 1003, Chicago, IL 60616. University of Chicago 1977. Subspecialty, emergency medicine. Single or multi-specialty group, partnership. Available July 1980.

Richard L. Rudolph, M.D., 124 Pearl Street, Red Bank 07701. CMDNJ 1976. Board eligible. Single or multi-specialty group, partnership. Available.

Robert H. Gordon, M.D., 5500 Wissahickon Ave., Apt. 405-C, Philadelphia, PA 19144. Jefferson 1975. Subspecialty, rheumatology. Board certified. Any type practice. Available July 1980.

Lawrence P. Saladino, M.D., 3428-B Alpine Court, Lexington, KY 40502.



Alert and functioning in the sunset years

Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:
Pentylenetetrazole 100 mg.
Nicotinic Acid 100 mg.
Ascorbic Acid 100 mg.
Thiamine HCL 25 mg.
l-Glutamic Acid 50 mg.
Niacinamide 5 mg.
Riboflavin 2 mg.
Pyridoxine HCL 3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Georgetown 1975. Subspecialty, emergency medicine. Institutional, multi-specialty group, emergency room. Available July 1980.

Laurence J. Clark, M.D., 5038 Clifhaven Drive, Annandale, VA 22003. Georgetown 1975. Subspecialty, emergency medicine. Partnership, solo, emergency room. Available July 1980.

Devi P. Misra, M.D., 7K University Terrace, Columbia, MO 65201. SCB Medical College (India) 1967. Subspecialty, pulmonary medicine. Board certified. Solo, institutional, group. Available July 1980.

Jon Allen Kotler, M.D., c/o Dept. of Medicine, 1356 Lusitana Street, Honolulu, HI 96813. Emory 1976. Subspecialty, emergency medicine. Board eligible. Single or multi-specialty group, partnership. Available.

Howard L. Kramer, M.D., 4 Longfellow Place, Apt. 803, Boston, MA 02114. Florida 1975. Board certified. Single or multi-specialty group, partnership. Available.

Mirza M. Ashraf, M.D., West St. Road, Carthage, NY 13619. King Edward (Pakistan) 1967. Subspecialty, cardiovascular diseases. Solo, single-specialty group, institutional. Available.

Mohamed M. Haq, M.D., 10555 Fondren, Apt. 422, Houston, TX 77096. Osmania (India) 1973. Subspecialty, neoplastic diseases. Board certified. Single or multi-specialty group, research. Available July 1980.

Betty J. Barcevac, M.D., 2795 Shore Parkway, Apt. 1-G, Brooklyn, NY 11223. Guadalajara (Mexico) 1976. Group, partnership, single or multi-specialty group. Available July 1980.

Robert Lebow, M.D., 77 Grove Street, Montclair 07042. SUNY-Downstate 1977. Board eligible. Academic, partnership, multi-specialty group, industrial. Available July 1980.

Ira E. Kaplan, M.D., 523 East 14th Street, New York, NY 10009. SUNY-Downstate 1976. Special interest, cardiology. Board certified. Group, partnership. Available July 1980.

Hyung G. Kim, M.D., 1834 Beacon Street, Washington CH, OH 43160. Yonsei (Korea) 1970. Subspecialty, cardiology. Board certified. Group, partnership, or hospital-based practice. Available June 1980.

Akbar H. Obaray, M.D., 61-20 Grand Central Parkway, Apt. A-1407. Forest Hills, NY 11375. Grant (India) 1972. Subspecialty, pulmonary medicine. Board certified. Solo, group, or partnership. Available July 1980.

NUCLEAR MEDICINE—Philip A. Bardfeld, M.D., 160 West End Avenue, Apt. 8-E, New York, NY 10023. SUNY-Downstate 1961. Board certified. Single or multi-specialty group, institution. Available.

OBSTETRICS/GYNECOLOGY—Lemuel G. Villaneuva, M.D., 173 Lionhead Court, Baltimore, MD 21237. University of East (Philippines) 1974. Board eligible. Solo, group, HMO associate, hospital-based. Available July 1980.

Mina M. Chudgar, M.D., 15427 Jester Avenue, Baton Rouge, LA 70816. B.J. Medical College (India) 1972. Board

eligible. Group, partnership. Available July 1980.

Mohammad Imtiaz Ahmad, M.D., 677 Central Avenue, Barboursville, WV 25504. Pakistan 1970. Board eligible. Solo with coverage when needed, small town. Available.

ONCOLOGY—Kumud S. Tripathy, M.D., 14 Slate Creek Drive, #5, Cheektowaga, NY 14227. P.W. Medical (India) 1972. Also, general internal medicine. Board certified (IM). Solo, group, institution-based, or partnership. Available July 1980.

OPHTHALMOLOGY—Ronald A. Serniuk, M.D., 502 Thompson Avenue, Roselle, NJ 07203. Georgetown 1971. Board eligible. Partnership or solo. Available.

Mitchell Schuman, M.D., 1675 York Avenue, New York, NY 10018. New York Medical 1975. Board eligible. Any type practice. Available July 1980.

Edward A. Pulice, M.D., 49-20 Hanford Street, Apt. #1, Douglastown, NY 11362. NYU 1976. Group, partnership, solo. Available July 1980.

PATHOLOGY—Uma Raghavan, M.D., Dept. of Pathology, Norwalk Hospital, Norwalk, CT 06850. Delhi (India) 1973. Both AP/CP. Board certified. Group. Available.

PEDIATRICS—Norma P. Samuy, M.D., 1180 East and West Road, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Solo, partnership, clinic. Available July 1980.

Soni Mahesh, M.D., 100 Hospital Plaza, #811, Paterson 07503. Baroda (India) 1973. Board eligible. Partnership or solo. Available July 1980.

PSYCHIATRY—Charles Goldfarb, M.D., 121 Deerhaven Road, Mahway 07430. Buffalo 1956. Board certified. Partnership in single or multi-specialty group. Available July 1980.

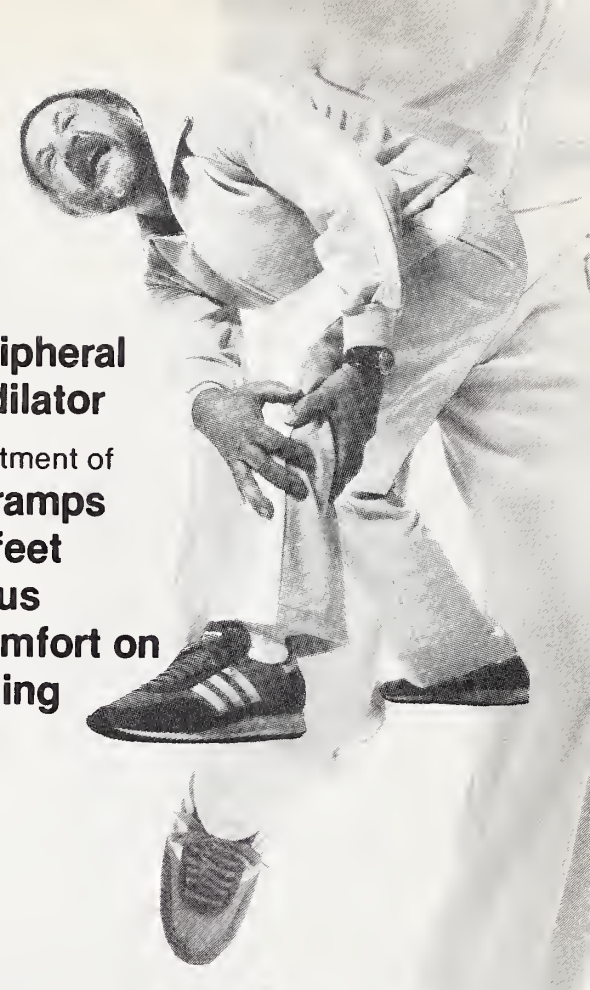
Paul L. Maitheny, M.D., 99 Pawnee Road, Lakewood, NJ 08701. Graz (Austria) 1951. Board eligible. Any type practice. Available July 1980.

PULMONARY DISEASES—Susan Kallos Sekely, M.D., 7528 Arlington Expressway (220), Jacksonville, FL 32211. Budapest U. of Med. Sciences 1952. Board certified. Hospital, group, or state institution. Available June 1980.

RADIOLOGY—Donald S. Cohen, M.D., 1089 Briar Way, Fort Lee 07024. Guadalajara (Mexico) 1975. Board eligible. Group, partnership, solo (will consider purchase). Available.

Bernard S. Jay, M.D., Box 1356, Madison, CT 06443. Georgetown 1971. Special interest, diagnostic radiology. Also, general internal medicine. Board certified. Group or hospital-based (shore areas), all aspects of ultrasound. Available.

SURGERY, GENERAL—B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.



A peripheral vasodilator

for treatment of
leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's
comfort/convenience
in choice of
3 strengths

Gradual Release
LIPO-NICIN®/300 mg.

Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release
LIPO-NICIN®/250 mg.

Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

Mohan Lal Sarwal, M.D., 42-52 Union Street, Apt. 117, Flushing, NY 11355. Govt. Medical, Patiala-Punjab (India) 1968. Group, partnership, solo. Available.

Mohammad A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roe Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Behune Ave., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Nardo T. San Diego, M.D., 171 Davis Avenue, Piscataway, NJ 08854. Far Eastern (Philippines) 1961. Board eligible. Solo or partnership. Available July 1980.

Seeplaputhur G. Sankar, M.D., 128 Normandy Drive, Norwood, MA 02062. Prince of Wales (India) 1974. Special interest, vascular surgery. Board eligible. Group, partnership, solo. Available July 1980.

Jung T. Tsai, M.D., 240 Willoughby Street, Apt. 8-D, Brooklyn, NY 11201. China Medical 1971. Board eligible. Solo, partnership, group. Available June 1980.

Absalon Gutierrez, M.D., 1925 Pacific Avenue, Atlantic City, NJ 08401. Nicaragua 1972. Board eligible. Group or emergency room. Available July 1980.

Jeffrey E. Lavigne, M.D., 1591 North Van Buren Avenue, Ottumwa, Iowa 52501. SUNY-Downstate 1970. Also, peripheral vascular surgery. Board certified. Any type practice. Available.

SURGERY, PLASTIC—Edmond B. Cabbabe, M.D., 5064 Clayridge Drive, Apt. 214, St. Louis, MO 63129. Damascus (Syria) 1972. Board eligible (general and plastic surgery). Solo or partnership. Available August 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available July 1980.

Anne-Marie Régal, M.D., 708 Beach Avenue, Bronx, NY 10473. Boston 1970. Board eligible. Single-specialty group, partnership, or institutional. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Sidndy Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available June 1980.

UROLOGY—G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

Eliahu Koren, M.D., 5700 Arlington Avenue, Apt. 6-J, Riverdale, NY 10471. Jerusalem 1968. Board eligible. Group, partnership, solo. Available July 1980.

Krishan G. Gupta, M.D., 21 Losson Garden Drive, Buffalo, NY 14227. Kanpur (India) 1964. Board eligible. Solo, partnership, group. Available July 1980.

LETTERS TO THE JOURNAL

NHI Per Senator Williams

March 19, 1980

Dear Editor:

As the most outspoken critic of national health insurance in MSNJ, I would like to object strenuously to your publication of the article by Senator Harrison Williams, without either a balancing, opposing viewpoint or a perceptive editorial comment.

As with so many issues in the general press, it is extremely difficult to counteract blatant unsubstantiated propaganda after the fact. Publication of any article, without a disclaimer, gives the impression of acceptance of its content.

His initial claim that politicians and physicians share a common goal is not reflected in any public opinion poll that I have ever seen. Their primary goal, as I see it, is reelection, through the promise of solutions to problems, real or imagined, by spending someone else's money, real or freshly printed.

He declares the obvious failures of governmental intrusion to have been successful, except for the element of cost. The cost factor in turn is laid at our doorstep rather than being the only possible result of the classic governmental problem-solving technique.

He objects to high-priced "cures," advocating "prevention" as if it were a costless or attainable goal. He ignores the experience of the English and the others who are ahead of us on the "Road to Ruin." They have found that care eventually is rationed, because of cost, with priority being given to acute emergencies, while early intervention is often postponed indefinitely.

His advocacy of the Kennedy Health Care for All Americans Act clearly indicates his support of the costliest most intrusive intervention. His contention that "administration" by private insurance companies would minimize governmental involvement is refuted by his own comments.

Fee levels would be negotiated between physicians and a national health board. Unless we were willing to abandon our traditional values, and resort to strikes or the threat thereof, our bargaining position would be somewhat below that of the New York garbage collectors.

It is interesting that he projects the use of a national relative value scale for fees. He apparently is unaware that such relative value scales originating from within the medical profession have been judged illegal. Our efforts constitute "price fixing." Their approach would apparently be considered as "benevolent despotism."

His most ludicrous comment was the promise of less paperwork. The only hope I see for that is the impending paper shortage. If the federal government requires most of the available paper to print inflationary money, there may not be enough left for the currently required forms.

He concludes with the concession that total implementation of his proposals is probably not feasible at this time, and cites catastrophic insurance as a step in his direction. This certainly validates the argument that I presented at last year's annual meeting, namely that catastrophic health insurance is a TRAP.

If you are planning to give equal time to our Junior Senator, I would appreciate the opportunity of rebutting his comments in the same issue in which they are published. Bill Bradley's voting record makes me expect that he would strongly support anything that sounded like "All Americans for Health Care." It has such a nice PR ring to it.

I'm looking forward to this year's annual meeting. There's not too much else to do in the swamp, so maybe we'll address some serious issues this time.

(signed) Frank J. Primich, M.D.

NEW YORK UNIVERSITY

POST-GRADUATE MEDICAL SCHOOL

Announces

MINICOURSE SERIES FOR PRIMARY CARE PHYSICIANS

SATURDAYS
9:00 A.M. to 1:15 P.M.

SEPTEMBER 1980 to JUNE 1981

Monthly clinically oriented programs to acquaint physicians with new developments in medicine.

322. DRUG STRATEGIES IN THE MANAGEMENT OF ARTHRITIS
September 6, 1980
Course Directors:
THOMAS KANTOR, M.D.
Professor of Clinical Medicine
MARTIN MELTZER, M.D.
Associate Professor of Clinical Medicine

412. AN APPROACH TO SPORTS MEDICINE IN OFFICE PRACTICE
October 11, 1980
Course Directors:
JOHN J. BONAMO, M.D.
Clinical Associate Professor of Orthopedic Surgery; Team Physician, New York Yankees
JEFFREY MINKOFF, M.D.
Clinical Associate Professor of Orthopedic Surgery; Team Physician, New York Islanders

311. WHEN AND HOW TO ADMINISTER THE NEW ANTIBIOTICS
November 8, 1980
Course Directors:
JAMES J. RAHAL, JR., M.D.
Associate Professor of Medicine
MICHAEL S. SIMBERKOFF, M.D.
Associate Professor of Medicine

310. NEW TECHNOLOGIES IN THE MANAGEMENT OF CHRONIC PAIN
December 13, 1980
Course Director:
B. BERTHOLD WOLFF, M.D.
Professor of Psychiatry

305. UPDATE: CARDIAC DRUG THERAPY
January 10, 1981
Course Directors:
KENNETH R. KRAUSS, M.D.
Assistant Professor of Medicine
PAUL A. TUNICK, M.D.
Instructor in Medicine

556. THE USE OF PSYCHOTROPIC DRUGS IN OFFICE PRACTICE
February 14, 1981
Course Directors:
PAUL P. CASADONTE, M.D.
Clinical Assistant Professor of Psychiatry
ARTHUR ZITRIN, M.D.
Professor of Psychiatry

160. FRESH INSIGHTS INTO COMMON SKIN PROBLEMS
March 14, 1981
Course Director:
DAVID L. RAMSAY, M.D.
Associate Professor of Dermatology

704. MICROSURGERY: IMPACT ON GENERAL MEDICAL AND SURGICAL SPECIALITIES
April 11, 1981
Course Director:
WILLIAM W. SHAW, M.D.
Assistant Professor of Surgery (Plastic Surgery); Director, Clinical Microsurgery and Replantation — Institute of Reconstructive and Plastic Surgery

250. WHAT THE PRIMARY PHYSICIAN CAN LEARN FROM FORENSIC MEDICINE
May 9, 1981
Course Director:
MICHAEL M. BADEN, M.D.
Associate Professor of Forensic Medicine
Deputy Chief Medical Examiner, New York City

478. IMMUNIZATION UPDATE: 1981
June 13, 1981
Course Directors:
ANNE A. GERSHON, M.D.
Associate Professor of Pediatrics
SAUL KRUGMAN, M.D.
Professor of Pediatrics

Fee: $35 per course; $245 for entire series. **ACCREDITATION: 4 AMA Category 1 credit hours per course.**

Preregistration Form **Please Type or Print**

A SERIES OF MINICOURSES FOR PRIMARY CARE PHYSICIANS

Name _____

Address _____
No. & Street City State Zip

Return with check payable to NYU Post-Graduate Medical School to: Registration Department, NYU Post-Graduate Medical School, Rm. 4-20-0, LHB, 550 First Avenue, New York, N.Y. 10016
(212) 679-8745 (24-hour telephone service)

Register me in course(s): please check

☐ 322 ☐ 412 ☐ 311 ☐ 310 ☐ 305 ☐ 556 ☐ 160
☐ 704 ☐ 250 ☐ 478
☐ Send Course Brochure

NJ 5/8

CME CALENDAR

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

June

3 **Arthritis**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

3 **Cyanotic Heart Disease**
9 a.m.—Freehold Area Hospital
(AMNJ)

3 **Medical Lecture Series**
10 9-10 a.m.—Holy Name Hospital,
17 Teaneck
24 *(Holy Name Hospital and AMNJ)*

3 **Thyroid Gland/Endocrinology**
8:30-11p.m.—Saddle Brook Hospital, Saddle Brook
(Saddle Brook General Hospital and AMNJ)

4 **The Critically Ill Patient**
11:30 a.m.-1p.m.—Rahway Hospital
(AMNJ)

4 **Annual Meeting—GI Update**
1-5 p.m.—Rutgers Medical School, Piscataway
(NJ Gastroenterological Society and AMNJ)

4 **Coronary and Peripheral Atherosclerosis**
9 a.m.-4 p.m.—Hyatt House, Cherry Hill
(American Heart Association, Camden County Chapter, AMNJ)

4 **Political/Economic Obstacles in Conquest of Leukemia**
1:30-5:30 p.m.—NJ Medical School, Newark
(CMDNJ, Leukemia Society of American, Inc. and AMNJ)

4 **Office Management of Hypertension**
8 a.m.-4:25 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

4 **Medical Lecture Series**
11 1-3 p.m.—Christ Hospital, Jersey City
18 *(Christ Hospital and AMNJ)*
25

4 **Diabetes**
10:30 a.m.-12 noon—St. Mary's Hospital, Passaic
(AMNJ)

4 **Multiple Sclerosis: Update**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

4 **Advances in Medicine**
11 9:30-11 a.m.—Bergen Pines County
18 Hospital, Paramus
25 *(Bergen Pines County Hospital and AMNJ)*

5 **Peripheral Arterial Insufficiency**
2-3 p.m.—Deborah Heart and Lung Center, Browns Mills
(Deborah Heart and Lung Center and AMNJ)

5 **Idiopathic Thrombocytopenia Purpura**
12 **Esophageal Disorder**
9:30-11 a.m.—Newark Beth Israel Medical Center
(Newark Beth Israel Medical Center and AMNJ)

6 **Endocrinology Conferences**
3:30-5 p.m.—Rotates between College Hospital, Newark Beth Israel Medical Center, Newark, and VA Medical Center, East Orange
(Endocrinology Section of AMNJ)

10 **Forensic Pediatrics**
8-9:30 p.m.—Shore Memorial Hospital, Somers Point
(Lederle Laboratories, Shore Memorial Hospital and AMNJ)

10 **Infections in the Abnormal Host**
9-10 a.m.-Holy Name Hospital, Teaneck
(Holy Name Hospital and AMNJ)

11 **Crystal Deposit Joint Disease**
9:30-11:30 a.m.—Riverside Hospital, Boonton
(Riverside Hospital, Dover General Hospital, St. Clare's Hospital and AMNJ)

14 **Knee Arthrography**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

14 **Flexible Fiberoptic Sigmoidoscopy**
9 a.m.-4 p.m.—Rutgers Medical School, Piscataway
(CMDNJ and AMNJ)

16 **Intractable Diarrhea**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

16 **Skin Signs of Systemic Disease, Part I**
12:30-1:30 p.m.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

17 **Intravenous Pyelography Conference**
7-9 p.m.—VA Hospital, East Orange
(CMDNJ-NJ Medical School and AMNJ)

17 **Hodgkin's Disease**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

17 **Urology**
11 a.m.—Greystone Park Psychiatric Hospital
(AMNJ)

20 **Pernicious Anemia**
12 noon—Freehold Area Hospital
(AMNJ)

NEUROLOGY/PSYCHIATRY

June

2 **An Adolescent's Suicide Attempt**
8-10 p.m.—9 Marquette Road, Montclair
(Essex Psychiatric Seminar and AMNJ)

2 **Neuroscience Conferences**
9 11:30-12:30 p.m.—Bergen Pines County
Hospital, Paramus
(Bergen Pines County Hospital and AMNJ)

3 **Psychiatric Case Conference**
10 7:30-9:30 a.m.—Trenton Psychiatric
17 Hospital
24 *(Trenton Psychiatric Hospital and AMNJ)*

3 **Migraine/Chronic Muscle Tension Headaches**
10 **Multiple Sclerosis**
17 **Cerebrovascular Disease**
24 **Major Types of Seizure Disorder**
8-9 a.m.—Garden State Community Hospital, Marlton
(Garden State Community Hospital and AMNJ)

4 **Sleep Disorders**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

4 **Behavioral Psychiatric Treatment of Gastrointestinal Disorders**
18 **Biological Aspects of Schizophrenia**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

4 **Ongoing Child Psychiatry Case**
11 **Conference**
18 8:30-10:30 a.m.—Trenton Psychiatric
25 Hospital
(Trenton Psychiatric Hospital and AMNJ)

5 **Psychiatric Lecture Series**
12 11 a.m.-12 noon—Greystone Park
19 Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

6 **Improving Psychotherapeutic Techniques**
8-10 p.m.—312 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

6- **Psychiatry for the Eighties**
8 World Internat'l Hotel, Atlantic City
(University of Pennsylvania)

From the Continuing Medical Education Desk



RECENT
PROGRESS
SYMPOSIUM

June 28, 1980
(6 Hours CME Credit)

PSYCHIATRIC EMERGENCIES
PART TWO

featuring

Andrew E. Slaby, M.D., Ph. D., M.P.H.
Professor of Medicine and Psychiatry, Brown University

and

Other Distinguished Speakers from
Yale University School of Medicine
and
The National Institute of Mental Health.

Contact
FAIR OAKS HOSPITAL, Summit, N. J. 07901
(201) 277-2300

ANNUAL AWARDS DINNER
of the
ACADEMY OF MEDICINE OF NEW JERSEY

Wednesday, May 28, 1980
6:00 P.M.

at

THE CHANTICLER
Millburn, New Jersey

1980 AWARD RECIPIENTS

EDWARD J. ILL AWARD
JAMES S. TODD, M.D.

CITIZENS AWARD
THE HONORABLE RICHARD J. HUGHES

For further information, contact Executive Offices
of the AMNJ
609-896-1717

7 **Outpatient Decision Making**
9-11 a.m.—Fair Oaks Hospital, Summit
(Fair Oaks Hospital)

11 **1980 Drug-Induced Psychoses**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

11 **Grand Rounds in Psychiatry and**
25 **Mental Health Sciences**
1:30-3 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

11 **The Alcoholic Family: A Systems Therapy Approach**
8:30-10 p.m.—Westfield High School, Westfield
(John E. Runnells Hospital, Berkeley Heights and AMNJ)

12 **Freud and Horney: Psychoanalytic Models via the Analysis of a Controversy**
8:30-10:30 p.m.—St. Barnabas Medical Center, Livingston
(NJ Psychoanalytic Society and AMNJ)

18 **Special Problems in Neurology—A Workshop**
7-9:30 p.m.—VA Medical Center, East Orange
(VA Medical Center and AMNJ)

OBSTETRICS/GYNECOLOGY

June

4 **Combined Grand Rounds in Obstetrics/**
11 **Gynecology**
18 3-5 p.m.—Rotates between College
25 Hospital, Newark Beth Israel Medical Center, St. Michael's Medical Center, Newark, St. Joseph's Hospital and Medical Center, Paterson, and Jersey City Medical Cente
(CMDNJ and AMNJ)

5 **Grand Rounds in Obstetrics/**
12 **Gynecology**
19 4-5 p.m.—College Hospital, Newark
26 *(CMDNJ and AMNJ)*

13 **Gynecologic Endocrinopathies**
8-9 a.m.—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

6 **Breast Carcinoma**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

PATHOLOGY

June

7 **Dermatopathology: A Practice Self-Assessment Course**
8:30 a.m.-4:40 p.m.—NJ Medical School, Newark
(CMDNJ and AMNJ)

10 **Pathology Lectures**
1-2:30 p.m.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

10 **Renal Biopsy Conferences**
12:30-2 p.m.—Barnert Memorial Hospital, Paterson
(Barnert Memorial Hospital and AMNJ)

PEDIATRICS

June

16 **Intractable Diarrhea**
12 noon—Mountainside Hospital, Montclair
(Mountainside Hospital and AMNJ)

RADIOLOGY

June

11 **Neuro-Radiology Meetings**
7:45-10:15 p.m.—Morristown Memorial Hospital
(Morristown Memorial Hospital and AMNJ)

14 **Knee Arthrography**
8-10 a.m.—Newcomb Hospital, Vineland
(Newcomb Hospital)

GENERAL SURGERY

June

3 **Tumor Conferences**
10 11 a.m.-12 noon—Morristown Memorial Hospital
17 *(Morristown Memorial Hospital and AMNJ)*
24

11 **Coronary Artery Bypass**
1-3 p.m.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

17 **Colon/Rectal Cancer**
8:30 p.m.—Fair Lawn Memorial Hospital
(AMNJ)

20 **Tumor Conference**
12 noon-1 p.m.—Elizabeth General Hospital
(Elizabeth General Hospital and AMNJ)

24 **Cardiovascular Surgery**
8 p.m.—Warren Hospital, Phillipsburg
(AMNJ)

SURGICAL SPECIALTIES (includes ENT, Neurosurgery, Ophthalmology, Orthopedic, Plastic, and Vascular Surgery.)

June

9 **Third Annual Symposium on Vascular Surgery**
12:15—9 p.m.—Meadowland Hilton Hotel, Secaucus
(New Jersey Vascular Society, American Heart Association, Bergen County Chapter, Englewood Hospital, Vascular Surgical Service and AMNJ)

18 **Surgical Procedures in Neurogenic Bladder**
4-5 p.m.—Kessler Institute for Rehabilitation, West Orange
(Kessler Institute and AMNJ)

24 **Liver Trauma**
8-10 p.m.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

MISCELLANEOUS

June

19 **Physiological Aspects of Human Aging**
5-6:30 p.m.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

OBITUARIES

Dr. George V. Artaserse

George V. Artaserse, M.D., of Jersey City, a member of our Hudson County component, died on February 27. Born in 1909 and a graduate of Georgetown University Medical School, class of 1936, Dr. Artaserse was a family practitioner in the Jersey City area for many years. During World War II he served in the department of medicine of the Army of the United States.

Dr. Frank H. Feldman

On February 3, Frank H. Feldman, M.D., a member of the Essex County component, died in Baptist Hospital, Miami, Florida, after a long illness. Born in Newark in 1908, Dr. Feldman was graduated from the Royal College of Physicians and Surgeons in Edinburgh, class of 1936. He had pursued graduate work in allergy and cardiology and elected to establish a practice in allergy in South Orange, which he maintained until illness forced his retirement

in 1978. He had been affiliated with Newark Beth Israel Medical Center, the Lutheran Hospital in Newark, and St. Barnabas Medical Center in Livingston. Dr. Feldman was a Fellow of the American College of Allergists.

Dr. Paul Illovsky

At the untimely age of 58, Paul Illovsky, M.D., a member of the Hunterdon County component, died of a heart ailment on January 7, in Hunterdon Medical Center, Flemington, where he was assistant director of laboratories. A native of Hungary, born in 1921, Dr. Illovsky was graduated from the medical college of the University of Rome in 1952 and emigrated to the United States for residencies in pathology in Brooklyn and New York. He was a diplomate of the American Board of Pathology and a Fellow of the American College of Pathologists.

Dr. Vito J. Kemezis

On March 25, a member of our Bergen County component, Vito J. Kemezis, M.D., died at his home. A native of Hudson County, Dr. Kemezis was graduated from Hahnemann Medical College, class of 1943 and had been a family practitioner, with special interest in pediatrics, in Closter for many years. He had been affiliated with the Holy Name Hospital in Teaneck. During World War II, Dr. Kemezis served in the medical department of the United States Air Force. He was 62 years old at the time of his death.

Dr. Grace T. Newman

An emeritus member of our Essex County component, Grace T. Newman, M.D., of Medford, died at Medford Leas Medical Center on February 25. A native of Brooklyn, Dr. Newman was graduated from Cornell Medical College in 1928 and had practiced gynecology in Montclair for 40 years before retirement in 1968. She had been affiliated with Mountainside Hospital. Dr. Newman was 81 years old at the time of her death, and was a recipient of MSNJ's Golden Merit Award in 1978, in recognition of her 50 years as a physician.

Dr. Seymour S. Philo

Seymour Saul Philo, M.D., a well-known internist in Trenton, died on March 20 in St. Francis Medical Center, Trenton, after a long illness. A native of Brooklyn, Dr. Philo received his medical degree from New York University College of Medicine, class of 1941 and practiced in the Trenton area for over thirty years until illness forced him to retire about a year ago. Dr. Philo had been assistant professor of medicine at Hahnemann Medical College, assistant clinical professor of medicine at Rutgers Medical School, and director of medicine at St. Francis Medical Center. He held membership in many organizations including the American Association for the Advancement of Science, the Association of Military Surgeons of the United States, and the World Medical Association. Dr. Philo was a diplomate in internal medicine and had been treasurer of the Society of Internal Medicine of New Jersey. During World War II he served five years in the medical corps of the AUS. Dr. Philo was 63 years old at the time of his death.

Dr. Allan Rieck

At the grand age of 81, Allan Rieck, M.D., a prominent Atlantic County physician, died on February 17 in Meadowview Nursing Home, Pleasantville. A native of Millville, Dr. Rieck was graduated from Indiana School of Medicine in 1927 and pursued graduate work in cardiology. He had been chief of the cardiac clinic at Atlantic City Medical Center, and chief of cardiology at Millville Hospital and the Shore Memorial Hospital in Somers Point. He was instrumental in the creation of the heart station at Burdette-Tomlin Memorial Hospital in Cape May Court House. Dr. Rieck also was affiliated with the Atlantic County Hospital for Tuberculous Diseases and medical director of the Atlantic County Hospital for Mental Diseases. He was a Fellow of the American College of Cardiology. During World War II Dr. Rieck served with the department of medicine of the AUS. In 1977 he received MSNJ's Golden Merit Award honoring his 50 years of practice as a physician.

Dr. Joseph A. Rube

One of Ridgewood's well-known practitioners, Joseph A. Rubé, M.D., died on March 2. Born in 1905 and a graduate of Bellevue Medical College, class of 1929, Dr. Rubé was a neurosurgeon affiliated with Chilton Memorial Hospital in Pompton Plains, Valley Hospital in Ridgewood, and Paterson General in Wayne. He was a diplomate of the American Board of Surgery, and a Fellow of the American College of Surgeons and of the International College of Surgeons. During World War II Dr. Rubé served with the department of medicine of the United States Army.

Dr. Samuel Selinger

Samuel Selinger, M.D., of Hackettstown, died of a heart ailment at the Community Hospital there on January 30. A graduate of New York Medical College in 1918, Dr. Selinger had pursued graduate work in ophthalmology and otolaryngology, becoming board certified in each of those specialties. He also was a Fellow of the American College of Surgeons. Dr. Selinger had been affiliated with the North Hudson Hospital in Weehawken. He was 87 years old at the time of his death, and in 1968 had been a recipient of MSNJ's Golden Merit Award in recognition of his 50 years as a physician.

Max G. Straus

At the grand age of 85, Max G. Straus, M.D., a member of our Essex County component, died on March 25. A native of Wurzburg, Germany, Dr. Straus was graduated from the University of Vienna Medical College in 1921. He emigrated to the United States in 1938 and came to Maplewood to establish a general practice there. He had been affiliated with the Irvington General Hospital. Dr. Straus retired from practice in the early 1970s.

Dr. Leonard D. Williams

A former Plainfield practitioner who retired in 1976, Leonard D. Williams, M.D., died on February 12 at Dover General Hospital. A native of Staten Island, born in 1906, Dr. Williams was graduated from Long Island Medical College in 1931, and pursued residencies in internal medicine and gastroenterology. He was board certified in internal medicine and had been affiliated with Muhlenberg Hospital in Plainfield and the Veterans Administration facility at Lyons. He was a Fellow of the American College of Physicians and a member of the American Diabetes Association and American College of Gastroenterology. During World War II Dr. Williams served with the department of medicine of the United States Air Force.

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St., Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____

ASSISTANT MEDICAL DIRECTOR

Assistant Medical Director for State Agency. Salary open. Boards and Administrative experience preferred but not essential. Please write to:

Box No. 189
c/o JOURNAL MSNJ
2 Princess Road
Lawrenceville, N.J. 08648

Needed

Cardiologist needed in private practice in Hammonton, N.J. Income $46,800 per year. Please write to:

Box No. 191
c/o JOURNAL MSNJ
2 Princess Road
Lawrenceville, N.J. 08648

NEEMA EMERGENCY MEDICAL
—a professional association—

EMERGENCY MEDICINE POSITIONS: available with emergency physician group throughout Pa., N.Y., N.J., Mich. and Southeastern U.S. including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits towards board certification. Physician department directors also desired. Please send resume to:

NEEMA Emergency Medical
Ste 400
399 Market St.
Phila., Pa. 19106

In PA call
(215) 925-3511
Those outside of PA call
(800) 523-0776

PSYCHIATRIST
(CHILD)

To work with children ages 5 to 13 in residential treatment program located in a beautiful area of central New Jersey, near the shore. Full time position as a member of a multidisciplinary team with innovative treatment approach. Salary negotiable. Civil Service benefits. Please send curriculum vitae to:

MICHAEL B. COFFEY, Personnel Director
ARTHUR BRISBANE CHILD TREATMENT CENTER
P.O. Box 625, Allaire Road
Farmingdale, New Jersey 07727
(201) 938-5061
Equal Opportunity Employer M/F

Picture yourself as an Air Force Physician

Consider an excellent income without overhead cost or red tape. Thirty days of paid vacation each year. Associates to care for your patients while you're away. Continued professional education. An income that continues if you're ill. Medical care for yourself and your family. And, if you qualify, a lifetime retirement income equivalent to half your base salary after only 20 years of active duty.

Additionally, well-equipped and well-staffed hospitals and clinics provide an excellent environment for your profession. And we know that's important to you.

Put yourself in the picture of good health care in the Air Force Medical Service.

For more information, contact:

Northern NJ
Capt. Richard T. Chamberlain
USAF Medical Recruiting
376 Hamburg Turnpike
Wayne, NJ 07470

Southern NJ
Capt. Marty Csercsevits
USAF Medical Recruiting
2201 Rt. 38, Suite 730
Cherry Hill, NJ 08002

Air Force. A great way of life.

RESIDENCY IN PHYSICAL MEDICINE AND REHABILITATION

Dynamic, young program with balanced academic and clinical emphasis under the supervision of 10 physiatrists. Three year program and integrated internship/residency with opportunity for research and pursuit of special interests both in medical school and private hospital settings. Stipends from $14,900 to $17,000 depending on qualifications. We will pay for visits in selected cases. Equal Opportunity/Affirmative Action Employer. Telephone or write for information to:

John F. Ditunno, Jr., M.D., Director
Department of Rehabilitation Medicine
Thomas Jefferson University Hospital
11th and Walnut Street
Philadelphia, Pa. 19107
Telephone: (215) 928-6573

CLASSIFIED ADVERTISEMENTS

UROLOGIST—Well trained at major New York City University Center. Will consider all types of practice. Available July 1980. G. Rosenberg, M.D., 205 W. 15th Street, New York City, N.Y. 10011.

GENERAL SURGEON/ONCOLOGIST—Seeks solo, group or partnership practice. Board eligible. Available July 1980. Dr. Seldera, 4114 9th Avenue, Brooklyn, N.Y. 11232. Telephone (212) 871-5167.

PHYSICIAN—For industrial clinic 6 hours a day, 9-3 P.M., Monday thru Friday. Elizabeth, N.J. Call (201) 467-0522 after 7 P.M.

FAMILY PRACTITIONER/GENERAL PRACTITIONER—For vigorous growing Family Practice Department in a large multi-specialty group in Northern New Jersey. Please reply to Box No. 188, c/o JOURNAL, MSNJ.

EMERGENCY ROOM PHYSICIAN—Full or Part-time. Academically oriented, Central, New Jersey, modern facility, financially rewarding. Call E.V. McGinley, M.D., (201) 277-0441.

PEDIATRIC ASSOCIATE—New Jersey Shore area, 1 1/2 hours to New York City and Philadelphia. Write Box No. 192, c/o JOURNAL, MSNJ.

DIAGNOSTIC RADIOLOGIST—Part-time position available immediately for Board eligible or certified radiologist. Prefer Tuesday and Thursday mornings. Location in South Jersey area. May lead to full-time position. Call or write Richard Krieger, M.D., c/o RKD, Inc., 102 Red Rambler Drive, Lafayette Hill, Pa. 19444. (215) 825-6629.

OTOLOGIST WANTED—Certified otolaryngoloist wanted as partner or to take over large industrial practice. Dr. Berney, Millburn, N.J., (201) 762-5829 or 762-2737.

USED MEDICAL EQUIPMENT—Desired by young internist/gastroenterologist setting up solo practice in South Jersey: EKG machine, exam tables, viewing boxes, etc. Call (215) 848-0936 evenings.

FOR SALE—Montclair-Upper; Stone and frame, slate roof, center hall, colonial, 5 bedrooms with additional 2 large rooms, bath, separate front and garden entrances, now used as psychiatrist's office and waiting room. Excellent condition, desirable area near park, good schools. $150,000. Call (201) 783-9837 Mondays and Thursdays, evenings and weekends.

FOR SALE—North Newark-Forest Hills Area; Medical Office Building. Suitable for 2-4 physicians. Fully furnished and equipped. Complete modern x-ray equipment and lab. Call (201) 672-8018 between 8-10 a.m. and 6-10 p.m.

FOR SALE—Orange-Seven Oaks Park; Ideal for a home and office, 8 room house, central air-conditioning, Honeywell air-cleaner, burglar alarm dictograph, built in fire alarm system, finished laundry room, glass enclosed terrace. All brick and stucco with an attached garage. Convenient to all hospitals and Route 280. Please phone (201) 538-7636.

FOR SALE—Doctor's Home—South Orange (Newstead); Brick colonial, four bedrooms, separate maid's room. Two level air conditioner (8 tons), $169,000. Dr. Berney (201) 762-5829 or 762-2737.

FOR SALE—Home/Office—Union County; Elegant, modern, split level home. Office with private entrances in affluent area of Union County. Equipped office with x-ray. High net Family Practice chiefly Internal Medicine. Retiring. Near seashore, N.Y.C. Good schools, hospital 10 minutes. Write Box No. 172, c/o JOURNAL, MSNJ.

OFFICE SPACE— Hunterdon County. For family practitioner(s) in modern professional building in growing suburban community. 5 rooms, $370; 7 rooms, $475. Write R.D.1, Box 247, Milford, N.J. 08848. (201) 995-2365.

OFFICE TO SHARE—Bergen County—Fully equipped for elective surgery with operating and recovery rooms. Ideal for Eye, ENT, Plastic. In Ft. Lee. Convenient to all of northern Jersey, New York, Westchester, and Long Island. Modern skyscraper, private entrance, parking. Will subdivide to suit. Write Box No. 176, c/o JOURNAL, MSNJ

FOR RENT—Medical office space, new and fully equipped, part or full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE AVAILABLE—Dover, N.J. Tuesday, Wednesday and Friday in large EENT office, near hospital. Suitable specialties: Dermatology, Allergy, Neurology, Neurosurgery, Plastic Surgery. Call (201) 366-0043.

OFFICE SPACE—Edison; Prestigious new building. Up to 1800 square feet. Occupancy June 1980. Ample off-street parking. Call M.R. Bronstein, M.D., (201) 826-5606.

OFFICE SPACE TO SHARE—Kearny, Arlington Section. Fully equipped and furnished; including x-ray and darkroom. Suitable for any specialty. Ample street parking. Call (201) 991-6664.

OFFICE SPACE—TO RENT OR SHARE—Ridgewood, Bergen County also Fair Lawn, Bergen County. Possible purchase, ideal locations. Write Box No. 190, c/o JOURNAL, MSNJ.

OFFICE SPACE TO SHARE—West New York. Excellent location fully equipped, part or full time. Ideal for eye, ENT, plastic surgeon or other specialists. Call (201) 278-1000.

FOR RENT—Physician's office. Furnished. Centrally located in New Brunswick. Call (201) 545-1660.

SPACE—New Medical office building in Somerset County. Two suites available. Pediatrician, Family Practitioner or Surgical Specialist especially needed. Excellent location with hospital and medical school affiliation possible. Call (201) 754-4111.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

OFFICE SPACE

Marlboro

Established location in growing affluent community. Approx. 650 sq. ft. Summer occupancy. Three additional units can be built to your specifications. Pediatrician and dentist currently in complex.

Colonial Professional Building
9 S. Main St.
Marlboro, N.J. 07746
(201) 431-1614

OFFICE SPACE FOR RENT

Office space available in attractive new professional building located on Main Street in center of town, central New Jersey area, with large hospital five minutes away. Presently, one active medical office in town of 14,000 plus. Presents an unusual opportunity for an immediately successful practice.

Call (201) 722-2928 for additional information.

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Institute provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

Patients are returned to the referring physician after appropriate studies have been made, together with a complete detailed report of the findings of the Institute and its consultants and recommendations for therapy. Literature on request.

Fairmont Medical Bldg.
1424 Second Avenue
New York, New York 10021
PHONE: 744-5500

ANNUAL AWARDS DINNER
of the
ACADEMY OF MEDICINE OF NEW JERSEY

Wednesday, May 28, 1980
6:00 P.M.

at

THE CHANTICLER
Millburn, New Jersey

1980 AWARD RECIPIENTS

EDWARD J. ILL AWARD
JAMES S. TODD, M.D.

CITIZENS AWARD
THE HONORABLE RICHARD J. HUGHES

For further information, contact Executive Offices of the AMNJ
609-896-1717

NOW a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE
COMPETITIVE RATES
OPEN ENROLLMENT JUNE AND DECEMBER

For More Information Contact
Donald F. Smith and Associates
Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield

June 1980

Journal of the Medical Society of New Jersey



The Library
Acquisitions Division
Univ. of Calif. San Francisco

LIBRARY
U.C. SAN FRANCISCO
JUN 25 1980

Augustus L. Baker, Jr. M.D.

Cirrhosis in Heroin Addicts
J. J. Ryan, M.D.

Anencephaly
J. Bonamo, M.D., et al.

No Heroics—A Jewish Perspective
M. A. Nevins, M.D.

Abortion:
PRO—M. S. Burnhill, M.D.
CON—D. L. Brendlinger, M.D.

Complete Table of Contents on Page 400

Send this coupon for no-obligation information of the savings under the Medical Society of New Jersey Endorsed Insurance Plans

Check this list against your coverages

- ☐ $4600 Monthly Guaranteed Convertible Accident and Health
- ☐ $5000 Monthly Practice Overhead Expense
- ☐ $250,000 Term Life Insurance
- ☐ $200 Deductible Million-Dollar Major Expense Plan for Blue Cross Holders
- ☐ $60-a-day Hospital Income Policy
- ☐ $200,000 High Limit Accident Plan
- ☐ Keogh and Corporate Plan

E. & W. Blanksteen Agency, Inc.

E. & W. Blanksteen
75 Montgomery St.,
Jersey City, N.J. 07302
(201) 333-4340
or (800) 742-2849

Name: _____

Address: _____

Tel. No. _____

Best Time To Call _____

DESCRIPTION: Methyltestosterone is 17β-Hydroxy-17-Methylandrost-4-en-3-one. **ACTIONS:** Methyltestosterone is an oil soluble androgenic hormone. **INDICATIONS:** In the male: 1. Eunuchoidism and eunichism. 2. Male climacteric symptoms when these are secondary to androgen deficiency. 3. Impotence due to androgenic deficiency. 4. Post-puberal cryptochidism with evidence of hypogonadism. Cholestatic hepatitis with jaundice and altered liver function tests, such as increased BSP retention, and rises in SGOT levels, have been reported after Methyltestosterone. These changes appear to be related to dosage of the drug. Therefore, in the presence of any changes in liver function tests, drug should be discontinued. **PRECAUTIONS:** Prolonged dosage of androgen may result in sodium and fluid retention. This may present a problem, especially in patients with compromised cardiac reserve or renal disease. In treating males for symptoms of climacteric, avoid stimulation to the point of increasing the nervous, mental, and physical activities beyond the patient's cardiovascular capacity. **CONTRAINDICATIONS:** Contraindicated in persons with known or suspected carcinoma of the prostate and in carcinoma of the male breast. Contraindicated in the presence of severe liver damage. **WARNINGS:** If priapism or other signs of excessive sexual stimulation develop, discontinue therapy. In the male, prolonged administration or excessive dosage may cause inhibition of testicular function, with resultant oligospermia and decrease in ejaculatory volume. Use cautiously in young boys to avoid premature epiphyseal closure or precocious sexual development. Hypersensitivity and gynecomastia may occur rarely. PBI may be decreased in patients taking androgens. Hypercalcemia may occur, particularly during therapy for metastatic breast carcinoma. If this occurs, the drug should be discontinued. **ADVERSE REACTIONS:** Cholestatic jaundice • Oligospermia and decreased ejaculatory volume • Hypercalcemia particularly in patients with metastatic breast carcinoma. This usually indicates progression of bone metastases • Sodium and water retention • Priapism • Virilization in female patients • Hypersensitivity and gynecomastia. **DOSAGE AND ADMINISTRATION:** Dosage must be strictly individualized, as patients vary widely in requirements. Daily requirements are best administered in divided doses. The following is suggested as an average daily dosage guide. **In the male:** Eunuchoidism and eunuchism, 10 to 40 mg.; Male climacteric symptoms and impotence due to androgen deficiency, 10 to 40 mg.; Postpuberal cryptorchism, 30 mg. **REFERENCE:** R. B. Greenblatt, M.D.; R. Witherington, M.D.; I. B. Sipahioglu, M.D.: Hormones for Improved Sexuality in the Male and the Female Climacteric. *Drug Therapy*, Sept. 1976. **SUPPLIED:** 5, 10, 25 mg. in bottles of 60, 250. Rx only.

When impotence is due to androgenic deficiency.

Android® /5 mg. Buccal /10 mg. Oral /25 mg. Oral

Methyltestosterone U.S.P. Tablets

A well absorbed oral androgen.

Additional indications: Replacement therapy. When androgen deficiency is the cause of: male climacteric/eunuchoidism, eunuchism/post-puberal cryptorchidism.



Write for new double-blind study reprints and samples.

BROWN **THE BROWN PHARMACEUTICAL CO., INC.**
500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

THE MEDICAL SOCIETY OF NEW JERSEY

Founded July 23, 1766

Officers and Trustees

PRESIDENT
Augustus L. Baker, Jr., M.D. (Morris) Dover
PRESIDENT-ELECT
Armando F. Goracci, M.D. (Gloucester) Woodbury
FIRST VICE-PRESIDENT
Howard D. Slobodien, M.D. (Middlesex) Perth Amboy
SECOND VICE-PRESIDENT
Alexander D. Kovacs, M.D. (Union) Scotch Plains
IMMEDIATE PAST-PRESIDENT
Alfred A. Alessi, M.D. (Bergen) Hackensack
SECRETARY
Arthur Bernstein, M.D. (Essex) East Orange
TREASURER
Rudolph C. Gering, M.D. (Mercer) Pennington

Trustees

CHAIRMAN
William Greifinger, M.D. (1981) (Essex) Belleville
Meyer L. Abrams, M.D. (1982) (Burlington) Cherry Hill
Frank Campo, M.D. (1981) (Mercer) Trenton
Douglas M. Costabile, M.D. (1981) (Union) Murray Hill
John J. Crosby, Jr., M.D. (1981) (Hudson) Jersey City
Anthony P. DeSpirito, M.D. (1982) (Monmouth) Neptune City
Ralph J. Fioretti, M.D. (1983) (Bergen) Rochelle Park
Palma E. Formica, M.D. (1981) (Middlesex) Old Bridge
Sherman Garrison, M.D. (1983) (Cumerland) Bridgeton
John P. Kengeter, M.D. (1981) (Ocean) Toms River
Richard E. Lang, M.D. (1981) (Passaic) Passaic
Myles C. Morrison, Jr., M.D. (1982) (Morris) Morristown
John A Surmonte, M.D. (1981) (Salem) Penns Grove
Frank Y. Watson, M.D. (1983) (Essex) Montclair

Councilors

FIRST DISTRICT
(Essex, Morris, Union, and Warren Counties)
Merton L. Griswold, Jr., M.D. (1981) Plainfield
SECOND DISTRICT
(Bergen, Hudson, Passaic, and Sussex Counties)
Robert A. Weinstein, M.D. (1983) Newton
THIRD DISTRICT
(Hunterdon, Mercer, Middlesex, and Somerset Counties)
Albert F. Moriconi, M.D. (1982) Trenton
FOURTH DISTRICT
(Burlington, Camden, Monmouth, and Ocean Counties)
Frederick W. Durham, M.D. (1981) Haddonfield
FIFTH DISTRICT
(Atlantic, Cape May, Cumberland, Gloucester, and Salem Counties)
Ronald M. Fisher, M.D. (1983) Bridgeton

AMA Delegates

William J. D'Elia, M.D. (1981) Spring Lake
Frederick W. Durham (1982) Haddonfield
Karl T. Franzoni, M.D. (1982) Trenton
Henry J. Mineur, M.D. (1982) Cranford
Myles C. Morrison, Jr., M.D. (1980) Morristown
James S. Todd, M.D. (1981) Ridgewood
Robert E. Verdon, M.D. (1980) Cliffside Park

June 1980

Publication Committee

Paul J. Hirsch, M.D., *Chairman*
Julio C. del Castillo, M.D.
John F. Marshall, M.D.

Editor

Arthur Krosnick, M.D.

Managing Editor

Marjorie D. Treptow

Advertising Manager

E. Elizabeth Cookson

Executive Director

Vincent A. Maressa

Executive Director Emeritus

Richard I. Nevin

Manuscript Review Board

Jerome Abrams, M.D.
Harold Arlen, M.D.
Alfonse Cinotti, M.D.
Stuart D. Cook, M.D.
Robert Dodelson, M.D.
Wm. A. Dwyer, Jr., M.D.
Norman H. Ertel, M.D.
Arthur Goldfarb, M.D.
Robert A. Goldstone, M.D.
Murray Kahn, M.D.
Monroe S. Karetzky, M.D.
Avrum L. Katcher, M.D.
Sidney Ketyer, M.D.
Bernard J. Koven, M.D.
Joel D. Levinson, M.D.
Henry R. Liss, M.D.
Hugh F. Luddecke, M.D.
Murray Nussbaum, M.D.
Christopher M. Papa, M.D.
Victor Parsonnet, M.D.
Bernard D. Pinck, M.D.
Irwin Pollack, M.D.
Edwin L. Rothfeld, M.D.
Benjamin Rush, M.D.
Morris H. Saffron, M.D.
Mark M. Singer, M.D.
Leon G. Smith, M.D.
Sheldon D. Solomon, M.D.
Lloyd N. Spindell, M.D.
A. Arthur Sugerman, M.D.

The Journal of the Medical Society of New Jersey (ISSN-0025-7524) is published monthly (since 1904) except semi-monthly in July (13 issues), under direction of the Committee on Publication, by the Medical Society of New Jersey. Two Princess Road, Lawrenceville, N.J. 08648. Printed in East Stroudsburg, Pa. by the Hughes Printing Co. Whole number of issues 912. Member's subscription ($10) is included in Society dues. Rates for nonmembers, $10; outside USA add $6.50 for postage. Single copies, $1. Address communications to *The Journal,* MSNJ, 2 Princess Road, Lawrenceville, N.J. 08648 (609) 896-1766. Second-class postage paid at Trenton, N.J. and additional entry office.

Copyright 1980 by the Medical Society of New Jersey.



Tagamet®

brand of

cimetidine

How Supplied:

Pale green 300 mg. tablets
in bottles of 100 and Single Unit Packages of 100
(intended for institutional use only).
Injection, 300 mg./2 ml.,
in single-dose vials
and in 8 ml. multiple-dose vials,
both in packages of 10.

SK&F LAB CO.
a SmithKline company

June 1980

Journal of the Medical Society of New Jersey

America's First Medical Society

406 **PROFESSIONAL LIABILITY COMMENTARY**

EDITORIALS

408 Augustus L. Baker, Jr., M.D.—188th President

408 Dr. Todd Honored

409 Happy Anniversary CMDNJ

409 Does Alcohol, Drug Abuse and Mental Health Treatment Affect Medical Care Utilization?

412 **JEMPAC REPORTORIAL**

ORIGINAL ARTICLES

415 Our Concerns for 1980-1981
Augustus L. Baker, Jr., M.D. Dover

419 Scalenotomy for Relief of Positional Vertebro-Basilar Ischemia
N. J. Demos, M.D.; H. Rubenstein, M.D.; C. Restivo, Sr., M.D., Jersey City

425 Laennec's Cirrhosis in Heroin Addicts on Methadone Maintenance
Joseph J. Ryan, M.D., Morristown

CASE REPORTS

430 Interaction of Hypogonadism and Polycythemia Rubra Vera
G. N. K. Reddy, M.D.; S. Nagar, M.D.; S. Trubowitz, M.D., East Orange

435 Metastatic Cancer in the Breast
Mahmoud Mousavi, M.D., Belleville

REVIEW ARTICLE

439 Anencephaly: An Overview
J. Bonamo, M.D.; C. A. Gregori, M.D.; J. L. Breen, M.D., Livingston

SPECIAL ARTICLE

442 No Heroics—A Jewish Perspective on Artificial Feeding of the Dying
Michael A. Nevins, M.D., Woodcliff Lake

FAREWELL ADDRESS

445 As We Give, We Receive
Alfred A. Alessi, M.D., Hackensack

NON-INVASIVE CARDIOLOGY

447 Idiopathic Hypertrophic Subaortic Stenosis
Michael V. Cohen, M.D., New York

CONTROVERSY

450 Abortion:
PRO—The Abortion Controversy: Will It Ever Disappear?
Michael S. Burnhill, M.D., New Brunswick
CON—Should We Change Our Attitudes About Abortion?
Dirck L. Brendlinger, M.D., Mount Holly

454 **HELP FOR IMPAIRED PHYSICIANS**

DOCTORS' NOTEBOOK

455 Trustees' Minutes: April 20, 1980

457 NJFHCE Report on Recommendations of MSNJ Task Force on IPA Project

471 Report from The Foundation

471 CMDNJ Notes

472 Tonometry Training Film

472 American College of Cardiology Fellows

472 Physicians Seeking Location in New Jersey

477 Julie Gambal Grimes, Auxiliary President

477 Clinical Center Study of Patients with Sarcomas

477 **CME CALENDAR**

478 **LETTERS TO THE JOURNAL**

479 **OBITUARIES**

480 **BOOK REVIEWS**

Cover

Augustus L. Baker, Jr., M.D., 188th President of the Medical Society of New Jersey. Dr. Baker assumed the office at ceremonies held on May 11, 1980. He is a surgeon with offices in Dover. (See editorial on page 408, this issue.) Photograph by Joyce Heisen

Volume 77
Number 6

Pages 397-484



You're Invited to Tour Our Facilities

The majority of physicians have never toured a modern rehabilitation hospital, and because of this we're extending an open invitation.

New Jersey Rehabilitation Hospital, located by Exit 145 of the Garden State Parkway, is a specialty hospital which treats catastrophic injuries to spinal cord and brain, stroke, quadriplegic, paraplegia, loss of limb, musculo-sketetal injuries, neck and low back injuries, and other mental and physical impairments, often resulting from automobile or work accidents.

To arrange for an escorted tour of our facilities, call Bucky Harris, at (201) 673-1860. We believe you'll be impressed with modern rehabilitation medicine.

New Jersey Rehabilitation Hospital

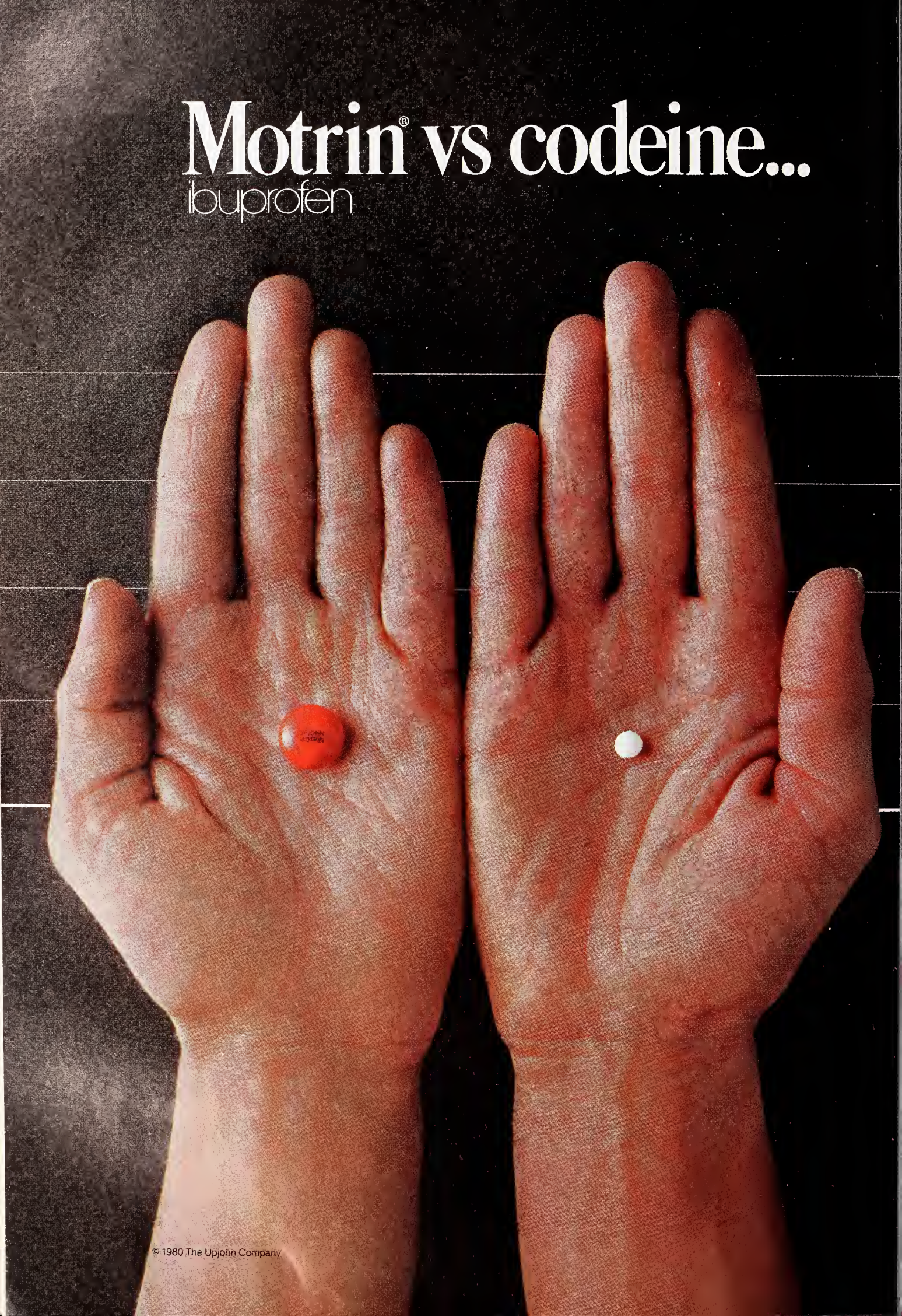
240 Central Avenue, East Orange, NJ 07018 • 201-673-1860

Bertrand J. Bensam, MD, Medical Director • Anthony G. DiCarlo, Administrator

Accredited by the Joint Commission on Accreditation of Hospitals, the Commission on Accreditation of Rehabilitation Facilities and the American Board for Certification in Orthotics and Prosthetics Inc.

Motrin® vs codeine...

ibuprofen



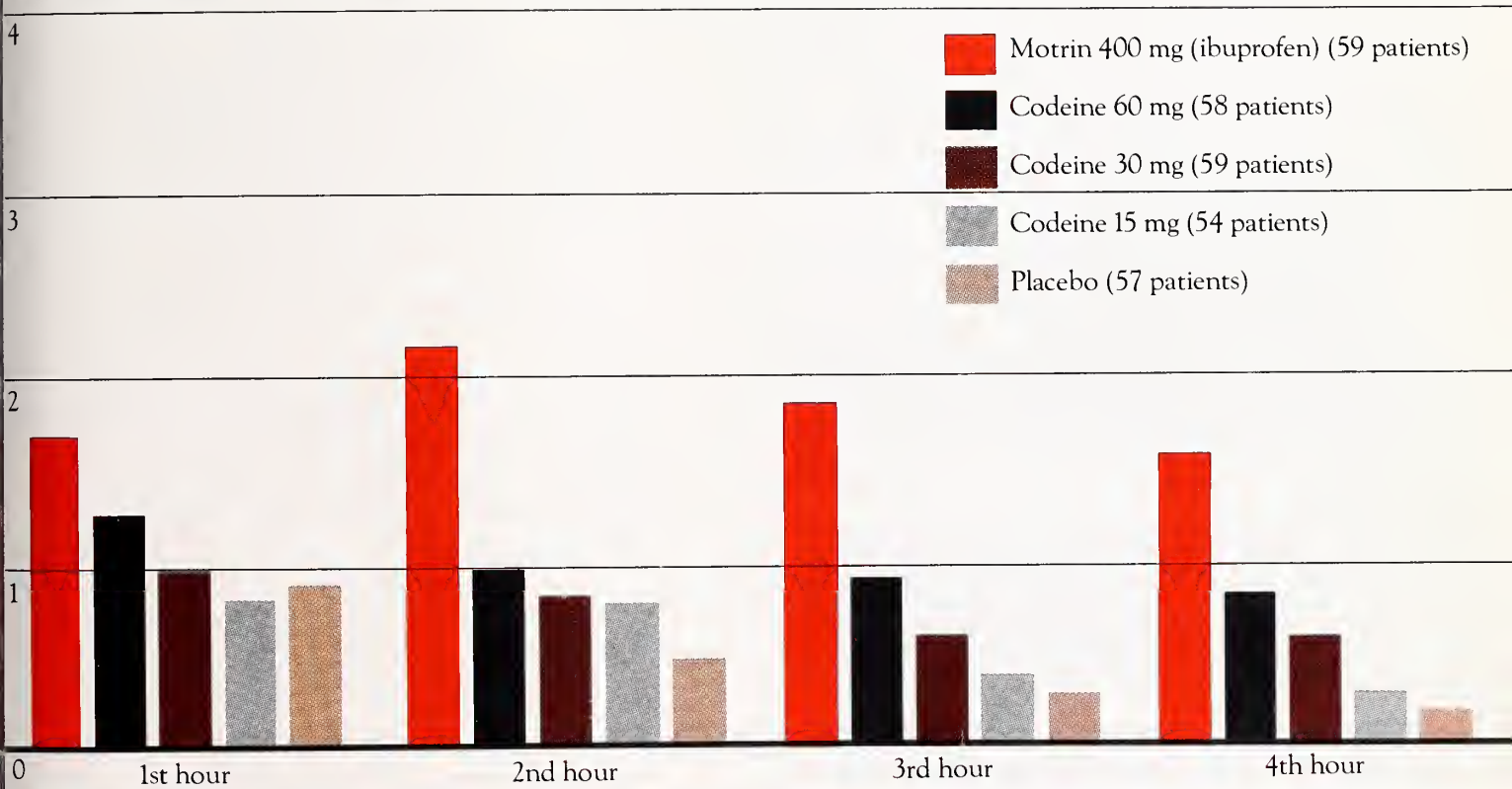
© 1980 The Upjohn Company

compare the analgesic effect

Motrin (ibuprofen) 400 mg tablets provided greater relief of pain than codeine in a double-blind, randomized clinical study of 287 patients. *Motrin* was significantly more effective ($p < 0.01$) than codeine 60 mg at the 2-, 3- and 4-hour intervals...significantly more effective ($p < 0.01$) than codeine 30 mg, codeine 15 mg, and placebo at all intervals.

Degree of pain relief—mean scores

4 = Excellent relief 3 = Good relief 2 = Fair relief 1 = Poor relief 0 = No relief



Data on file at The Upjohn Company.

One tablet q4-6h prn pain

A well-tolerated, nonarcotic prescription for mild to moderate pain

Motrin® 400 mg TABLETS

ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming • Acts peripherally
- Relieves pain rapidly • Indicated in acute and chronic pain • Well tolerated
- The most common side effect with *Motrin* is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Relief of mild to moderate pain.

Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy or by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d. Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

J-7835-4

May 1980

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

For the Investigation of
Problems of Human Infertility

The Institute provides a complete diagnostic and consultation service for infertile couples. Investigations are conducted by well-known specialists in conjunction with consultants in the various fields of medicine related to infertility.

Patients are returned to the referring physician after appropriate studies have been made, together with a complete detailed report of the findings of the Institute and its consultants and recommendations for therapy. Literature on request.

Fairmont Medical Bldg.
1424 Second Avenue
New York, New York 10021
PHONE: 744-5500

Information for Readers and Contributors

The Journal, the official organ of the Medical Society of New Jersey is published monthly under the direction of the Committee on Publication. Released the first week of the month, a copy is sent to each member of the Society. The goals of *The Journal* are educational and informational. All material published in *The Journal* is copyrighted by the Medical Society of New Jersey.

CONTENT

The educational content of each issue appears as original *scientific articles,* based on research, original concepts relative to epidemiology of disease, and treatment methodology; *case reports,* based on unusual clinical experiences; *review articles; clinical notes,* succinct items on some aspect or new observation or technique of a case experience; and *special articles,* which may include evaluations, policy and position papers, and reviews of non-scientific subjects. Material submitted here is for exclusive publication in *The Journal.* Upon request of the author, the Committee on Publication may give permission to authors of original material to reprint articles elsewhere with appropriate credit to *The Journal.* The principal aim in the preparation of contributions should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978) a transmittal letter or a separate statement accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by *all* authors:

"In consideration of *The Journal* of the Medical Society of New Jersey taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to the Medical Society of New Jersey, in the event that such work is published in *The Journal, MSNJ."*

Individuals, universities, libraries, and other non-profit organizations will be permitted to photocopy articles in *The Journal* for non-commercial, educational purposes.

SPECIFICATIONS

Manuscripts—Manuscripts must be typewritten double-spaced on 8-1/2 by 11" paper with margins of at least one inch. The original and one copy should be submitted to the Editors. Authors must understand that the material submitted is for the exclusive use of *The Journal* and will not be published elsewhere except in abstract form or with the consent of the Committee on Publication. Statistical methods used in articles should be identified. Acknowledgments of aid in preparation of manuscripts will not be made, except for specific preparation of an essential part of the manuscript (such as statistical data or special photographs).

Tables and Illustrations—Tables must be typewritten, double-spaced on separate 8-1/2 by 11" sheets. Each table must have a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum. Illustrations or figures should be of professional quality black-and-white glossy prints. They should be unmounted and not damaged by staples or paper clips. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Title Page—The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

Summary—The summary of the article should not exceed 250 words. It should contain the essential facts in such a form as to be understandable without reference to the text. Meticulous writing of this section is essential.

Abstract—The author should submit a 50-word abstract to be used at the beginning of the article.

Drug Names—Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References—References, which should not exceed 35 citations except in review articles, should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typed double-spaced on separate 8-1/2 by 11" sheets in the numerical order in which they are first cited in the text. The style of references is that of *Index Medicus.*

Examples:

Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, McGraw-Hill, 1969, pp 00-00.

Accident Facts. Chicago, Illinois, National Safety Council, 1974.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Manuscript Review Board, who render an opinion to the Editor. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors. Editorial changes which are made in the interest of clarity or good grammar may not be altered by the author. Reinsertion of redundant material deleted by the Editor is not permitted.

REPRINTS

Reprints may be ordered after the author is notified that his article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal,* MSNJ, 2 Princess Rd., Lawrenceville, N.J. 08648.

Featuring: Physician Responsibilities in Medical Record Keeping

Harold L. Hirsh, M.D., J.D. and Jonathan Bromberg, M.S., J.D.**

The need for accurate medical records goes beyond the efficient day-to-day practice of medicine. Medical records have become legal documents which play a major role in many matters, including medical malpractice. The responsibility of the physician to document properly the care provided to patients also turns up in personal injury suits, workers' compensation disputes, pension eligibility investigations and contests of wills. A 1971 study estimated that medical evidence played a part in about three-fourths of all civil cases and in about one-fourth of criminal cases brought to trial.[1]

For the physician, the medical record can be a great friend or the worst enemy. When hospital privileges are being reviewed, the medical records kept by the physician play an important role in the evaluation process. The Joint Commission on Accreditation of Hospitals (JCAH) requires hospitals to evaluate regularly many aspects of physician performance including record-keeping practices. Spotty, incomplete or unintelligible records play an important role in the decision to deny renewal of admitting privileges.

Evidence that an attending physician records accurately and clearly all aspects of patient care helps to make a strong case for renewing staff privileges.[2] The role of medical records in PSRO reviews likewise is an important one.

Physicians have lost claims for reimbursement from insurance companies and the government because they kept poor records or did not complete them in a timely fashion.[3]

The best defense in any action involving the practice of medicine is accurate, legible and complete records. The records must include material relevant to the patient's condition. A physician's observation of important signs and symptoms that indicate no abnormality should always be entered on the patient record. A written observation on a medical record is worth a hundred memories of what occurred.

Record keeping is time consuming, difficult and boring. The time spent documenting what you did may leave less time to provide patient services. Nevertheless, today we live in an age of accountability that requires documentation of what we have done.

The Physician's Responsibility—In deciding what to include in the medical record, the physician must keep in mind that it is almost impossible to prove that the physician did something or looked for something unless it is recorded. Negative findings should, of course, be recorded. Nevertheless, a negative entry that is all inclusive, while better than no entry at all, may be insufficient to demonstrate to a jury that all proper diagnostic steps were taken to arrive at an overall negative finding. You may feel personally comfortable with the use of an inclusive negative, or even with a system of not recording negative findings. But when the medical record becomes a legal document, such practices may prove to be a liability. Lawyers find these practices provocative.

In keeping records, there are ten commandments for the physician to follow for developing "good" records:

(1) Do them promptly.
(2) Do them yourself.
(3) Note the date and time of each entry.
(4) Write legibly.
(5) Never "edit" an entry, even for legibility.
(6) If an error is discovered, cross out the inaccurate material with a single line, initial it, note date and time and enter a marginal note as to why it is being replaced; then enter the correction in chronological order. Never alter the record.
(7) Record relevant facts—avoid vague and ambiguous statements such as "patient is feeling better." Vague and ambiguous entries may later haunt the physician when they are used to suggest poor, irresponsible or unresponsive care.
(8) Give opinion backed up by facts.
(9) Derogatory, trivial or loose comments about patients or colleagues should never be recorded. Such comments can prove embarrassing when publicized later and do nothing to improve the physician's position.
(10) Record accurately.

Finally, exercise care to protect the patient's privacy and confidentiality. A physician should ensure that records are not released to any unauthorized person. Obviously the physician's associates in the care of the patient are authorized to have access to the patient's record.

Disclosure of Medical Records—In general, the unauthorized disclosure of patient records by a hospital or physician may create legal liability unless the disclosure is to an authorized source, authorized by law or justified by a superior public interest. In a 1973 Alabama case a patient

*This item, from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Assistant Director and Editor.

**Dr. Hirsh is clinical assistant professor of medicine, Howard University College of Medicine; Mr. Bromberg is with DHEW. This article is reprinted from the November-December 1979 issue of *Malpractice Digest*, published by St. Paul Fire and Marine Insurance Company.

brought a successful action against his physician for damages allegedly suffered when the physician revealed information obtained during treatment of the patient to the patient's employer.[4] Other recent cases also have permitted recovery for unauthorized disclosure even for alleged educational purposes.[5] If anyone other than the patient requests the records, a physician should deny the request unless a written authorization has been signed by the patient or by a court order. It is better to err on the side of caution before releasing patient records to third parties than to be indiscriminate and allow others to have access to confidential patient records.

Changing or Altering Records—Deliberately changing or altering the medical record can be considered a fraudulent action. If discovered, the insurance company could refuse to defend or pay for any claims which involve a medical record that has been fraudulently altered. If after being sued for malpractice, a physician adds an entry to the record which indicates a certain finding was negative and the physician made the entry to cover up a lack of diligence in examining the patient, the physician has committed a fraudulent act. Even good faith alterations to the record based upon recall can get the physician in trouble. Good faith changes look exactly like fraudulent changes when reviewed by experts in document examination. If something is to be corrected, leave the existing entry intact, enter corrections in proper chronological order, explain why the correction was necessary and label late entries.

But what can you do if you failed to keep comprehensive records and are then faced with litigation (malpractice, reimbursement, or any kind of litigation) in which the medical records will play a major role? Simply avoid the temptation to alter the record even if done in good faith. If there was no malpractice involved, many insurance companies will find it difficult to defend a physician on the merits of the case upon discovering that the physician has tampered with the record. Insurance companies may settle such cases, even though the physician might have won, knowing that the credibility of the physician is completely undermined when such tampering is brought out during a trial.[6]

Another point relating to tampering with medical records involves your insurance coverage. Most medical malpractice insurance policies include a clause such as the following: "This policy will be void if you or any other protected person hides any important information from us, misleads us, or attempts to defraud or lie to us about any matter concerning this insurance, either before or after a loss."

Ownership and Possession of Medical Records—In years past, there never was a question about rights to medical records. The rules of personal property were extended to the paper, file folders, x-ray film, and so on, the physician having an absolute right of ownership. Recently, however, courts and various state legislatures have made medical records available to patients or patients' representatives. While maintaining physician's property rights to physical records, the patient's rights of access to information contained in records has been recognized. In most jurisdictions, it is no longer necessary for a patient to file suit against the physician in order to gain access to examine his records. In 1977, a New York court held that a patient who was contemplating a malpractice suit had a "property right" sufficient to afford her reasonable access to her records without first filing a malpractice action.[7] A number of states now have statutes as well as precedent court decisions permitting direct access by the patient to their medical records for the purpose of inspection or copying.[8]

A physician should know the local law regarding access to patient records. In jurisdictions not granting direct access of patients to their records, the physician may refuse to allow the patient to examine them. However, once a malpractice action is filed against the physician, the contents of the medical record are subject to discovery and must be turned over upon presentation of a subpoena signed by a judge.

Regardless of local law, the best policy is to allow patients to examine and copy records upon request unless there is a valid medical reason for refusing to do so. If a patient requests access to his record the physician usually can obviate any problems by going over the record with the patient. If this is unsuccessful, the patient should be given a copy of his record. A study sponsored by the Department of Health, Education, and Welfare demonstrated that making the record available actually discourages rather than encourages the incidence of filing malpractice suits.[6]

Summary—Physicians must always keep in mind that a properly documented medical record can serve as a good friend and witness. The physician must meet legally imposed duties regarding medical records. The contents must be properly recorded, the entire record kept safe and confidentiality guarded. The physician also must comply with local law pertaining to disclosure of the contents to patients, their representatives or to third parties. Though a time-consuming chore, the practice of keeping accurate medical records should become second nature to all physicians and other medical care providers. If not kept in good order and well maintained, the record becomes a sword in the hands of others.

References

[1]Matte, P.J.: Legal implications of the patient's medical record. In Wecht, C.J. (series ed.): *Legal Medicine Annual: 1971*. New York, Appleton-Century-Crofts, pp. 345-375.
[2]*Peterson v. Tucson General Hospital,* 559 P.2d 186(Ariz. 1976); *Duby v. Baron,* 341 N.E.2d 870 (1976).
[3]*Proper v. Mowry,* 568 P.2d 236 (N.Mex. Ct.App. 1977).
[4]*Horne v. Patton,* 287 So.2d 824 (1973).
[5]*Chuy v. Philadelphia Eagles Football Club,* 431 F.Supp. 254 (1977) and *Doe v. Roe,* 400 N.Y.S.2d 668 (1977).
[6]Hirsh, H.L.: Will your medical records get you into trouble? *Legal Aspects of Medical Practice.* 6(9): 46-51, 1978.
Application of Striegel, 399 N.Y.S.2d 584 (1977).
[8]McCaman, B. and Hirsh, H.L.: Medical Records - Legal Perspectives, *Primary Care,* 6(3): p. 688, 1979.
[9]Schade, H.I., My patients take their medical records with them. *Medical Economics,* May 8, 1976, pp. 75-81.
[10]U.S. Department of Health, Education and Welfare: Appendix. Report of the Secretary's Commission on Medical Malpractice, Reports, Studies and Analyses, Access to Medical Records, DHEW Pub. #(OS) 73-88, 1973.

STATE BOARD OF MEDICAL EXAMINERS' RULE

13:35-6.12 Release of patient records

(c) Copies of a physician's record or a summary report of such record and/or copies of all pertinent objective data and papers pertaining to a given patient shall be furnished to the patient or designated physician or duly authorized representative within 30 days of a written request by the patient or duly authorized representative. A reasonable charge may be made for such service. A partial record may be supplied, however, where, in the reasonable exercise of professional judgment, the physician believes that furnishing to or review by the patient of such record would be deleterious to the patient's best interests.

EDITORIALS

Augustus L. Baker, M.D.—188th President

Our new president summarized his credo for the next year as follows:

"[I will] work to increase membership in both the local [state] society and the American Medical Association because I feel that unity is our only defense against bureaucracy in Medicine."

Born in Dover and educated in local schools, the Newark Academy, Princeton University and the New York University College of Medicine, Dr. Baker is a practicing surgeon. Since specialty training, he has cultivated a distinguished career in surgery, medical organizations, the military, and the community while enjoying his family and a number of active hobbies. In brief, he has had a full and diverse life.

Augustus Baker interned at Mountainside Hospital in Montclair, served a general surgery residency at French Hospital, New York, and completed a surgical fellowship at Lahey Clinic, Boston. He was an Army medical officer from 1941 to 1947 with 39 months of foreign service with the Ninth Army in the European theater of operations. He attained the rank of lieutenant colonel and was awarded the Army Commendation Medal.

Dr. Baker has practiced at the Dover General Hospital since 1947, where he served as president of the medical staff and chairman of the department of surgery. He was president of the Morris County Medical Society (1959-1960) and served in numerous MSNJ posts over the years. In addition to membership in the American Medical Association, he is a Fellow of the American College of Surgeons and of the International College of Surgeons and a diplomate of the American Board of Surgery.

Married to the former E. Jean Black of Mountain Lakes, Dr. Baker has five children and one grandchild. He resides in Hopatcong. Recreational activities of the Baker family include sailing, skiing, and travel. Dr. Baker is a former commodore of the Lake Hopatcong Chapter of the National Antique and Classic Boat Club and a patron of the Mystic Seaport Restoration and Museum. He also is a "ham" radio operator.

Augustus Baker enjoys history and has participated in the Iron Area Historical Society, the Lake Hopatcong Historical Society, the New Jersey Historical Society and the New Jersey Canal Society.

With all of this, Dr. Baker has had the time and energy to serve eleven years on the Dover Board of Education, including three years as its president, and four years as a Dover alderman. He is past president of the Dover Rotary Club, past captain of Vigilant Engine Company No. 2, Dover Volunteer Fire Department, a director of the Charter Savings and Loan Association, and a director of Blue Shield of New Jersey.

Wow! What a busy life!

The Medical Society of New Jersey and its membership should have a safe journey with Dr. Augustus Baker at the helm as its 188th President. A.K.

Dr. Todd Honored

James S. Todd, our immediate past-chairman of the Board of Trustees of the Medical Society of New Jersey has been granted the Edward J. Ill Award by the Academy of Medicine of New Jersey for 1980.

This coveted honor has been given annually since 1939 to that New Jersey physician who merits it for his extraordinary professional service and for distinguished citizenship. Dr. Todd is a prime choice on both counts.

After his premedical studies at Harvard University, Jim was graduated with honors from its medical school and then served a surgical internship and residency at Columbia Presbyterian Medical Center in New York City. He also had postgraduate training in obstetrics and gynecology at Sloane Hospital for Women in New York. He is an instructor in surgery at Columbia University College of Physicians and Surgeons and is associated with the Valley Hospital in Ridgewood.

Dr. Todd, a Diplomate of the American Board of Surgery and a Fellow of the American College of Surgeons, has served New Jersey and American Medicine in many capacities. A past-president of the Bergen County Medical Society, he has participated with the AMA National Speakers' Bureau and the Greater New York Blood Program, and is president of the Bergen County Regional Community Blood Bank. He is on the board of managers of the Bergen Pines County Hospital and on the Physicians' Advisory Committee to the New Jersey Commissioner of Health. He is chairman of the Board of Directors of the New Jersey State Medical Underwriters, Inc. and had been chairman of the Board of Trustees of MSNJ since 1975.

Jim Todd and his wife Patricia, a registered nurse, and their two sons, Christopher 14 and Kendall 13, live in Ridgewood. Good humor and geniality are the hallmarks of this devoted family man who was born in Hyannis and still retains a trace of a Massachusetts accent. His great ability as a toastmaster has pleasured his fellow Trustees of the Board

of this Society at its annual dinner since he became its chairman.

Dr. Todd's reputation has reached national proportions and he is considered a prime candidate for the Board of Trustees of the American Medical Association. His philosophy in relation to American Medicine has been expressed in many items in this *Journal.* It is always clear that Jim is a champion for organized medicine while remaining a pragmatist who is aware of and responsive to the needs of patients, individually and as a community. He is deeply involved in formulating constructive change in medical policy while pointing out the need for physicians to discard outmoded and detached attitudes toward contemporary problems.

James S. Todd was an excellent choice for the 1980 Edward J. Ill Award, to which he will, in turn, bring honor as the latest of a long string of distinguished recipients.

A.K.

Happy Anniversary CMDNJ

The staff of *The Journal* joins the Board, Officers and membership of MSNJ in wishing CMDNJ a happy tenth anniversary.

The College of Medicine and Dentistry of New Jersey was created in June 1970 by the New Jersey State Legislature from what were then the New Jersey College of Medicine and Dentistry (formerly Seton Hall College of Medicine) and the Rutgers Medical School.

In the past decade CMDNJ has grown and continues to do so. The Legislature recently passed, and Governor Brendan Byrne signed, enabling legislation to expand the facilities at Piscataway for basic science education and to develop facilities in Camden to house clinical educational programs for both osteopathic and allopathic students. The total cost will not exceed $12 million.

Growth has not been limited to physical facilities, faculty size and funds; meaningful research and national reputation have steadily increased over the past decade.

CMDNJ has been graduating physicians who remain and practice in New Jersey, a fact which is vital to all our interest. It is our hope that CMDNJ continues to flourish over the decade to come.

A.K.

Does Alcohol, Drug Abuse and Mental Health Treatment Affect Medical Care Utilization?

The main reason for providing treatment for alcoholism, drug abuse and mental illness is, of course, the reduction of morbidity and mortality caused by these conditions. There are secondary reasons also. It has been suspected for years that alcohol, drug abuse and mental health (ADM) treatment may provide additional benefits in that the patient may require less medical care. A recent monograph reviews and assesses twenty-five studies reported between 1962 and 1979 which provide evidence on whether ADM treatment reduces subsequent medical care utilization.[1] In general, the studies did find such a reduction.

Twelve of thirteen studies found reductions of five to 85 percent following a mental health intervention, with a median reduction of 20 percent. The only study providing contrary evidence was carried out in a medically underserved neighborhood where mental health services provided in a new neighborhood health center were followed by a 72 percent increase in medical care use. The remaining 12 studies found reductions of 26 to 69 percent in either medical care utilization or indirect measures of utilization (such as number of sick days or amount paid out for sickness and accident benefits) following treatment for alcohol abuse. The median reduction was 40 percent. In the area of drug abuse the literature is sparse and evidence is mainly indirect.

The monograph is careful to point out the methodological inadequacies of many of the studies, such as inadequate control groups, short time spans, small samples and lack of trend analysis. The studies also focused primarily on outpatient psychotherapy in organized health care settings such as HMOs and on alcoholism treatment provided through employee-based programs and HMOs.

Some very limited policy implications can be drawn from these studies. Treatment in the organized health care settings did appear to be associated with reduction of medical care utilization; whether treatment in other settings is also effective must await more research. On the question of whether further integrations and linkage of ADM and health care services might be beneficial, 14 of the studies in integrated settings appeared to show that integration may result in certain cost savings, at least some of which may have been due to the reduction of inappropriate care given previously. However, two mental health and at least eight alcohol studies found similar reductions without integrations. Another policy question was whether insurance coverage for ADM services may lead to reduction in insurance costs for health care. This question could not be answered from the results of the present group of studies; it is an important question which should be investigated further, especially within the unorganized, fee-for-service sector.

Although the studies are nearly unanimous in indicating reduction of general health care service utilization after treatment for alcoholism, drug abuse or mental illness one must agree with Gerald Klerman's note of caution in his preface to the monograph: the methodological limitations noted above raise questions about the validity of the results and at the same time lead to important recommendations on how future, more definitive studies should be done. More vigorous studies may provide a basis for policy decisions on how ADM and general medical services should best be provided within the medical care systems of the future.

A. Arthur Sugerman, M.D.

[1]Jones KR, Vischi, TR: Impact of alcohol, drug abuse and mental health treatment on medical care utilization: A review of the research literature. *Medical Care* (supplement) 17:vi + 82 (Dec) 1979.

No one else can give us what you can.

(Join Us. Please.)



The American Red Cross. The Good Neighbor.

A Public Service of This Magazine & The Advertising Council

Ad Council

- provides effective symptomatic relief
- *b.i.d.* dosage simplifies therapy
- scored tablet for dosage flexibility

OPTIMINE®

azatadine maleate, 1 mg. tablets

CONTRAINDICATIONS Use in Newborn or Premature Infants: This drug should not be used in newborn or premature infants.

Use in Nursing Mothers: Because of the higher risk of antihistamines for infants generally and for newborns and prematures in particular, antihistamine therapy is contraindicated in nursing mothers.

Use in Lower Respiratory Disease: Antihistamines should NOT be used to treat lower respiratory tract symptoms including asthma.

Antihistamines are also contraindicated in the following conditions: hypersensitivity to azatadine maleate and other antihistamines of similar chemical structure; monoamine oxidase inhibitor therapy (See DRUG INTERACTIONS Section).

WARNINGS Antihistamines should be used with considerable caution in patients with: narrow angle glaucoma; stenosing peptic ulcer; pyloroduodenal obstruction; symptomatic prostatic hypertrophy; bladder neck obstruction.

Use in Children: In infants and children especially, antihistamines in overdosage may cause hallucinations, convulsions, or death.

As in adults, antihistamines may diminish mental alertness in children. In the young child, particularly, they may produce excitation.

OPTIMINE TABLETS ARE NOT INTENDED FOR USE IN CHILDREN UNDER 12 YEARS OF AGE.

Use in Pregnancy: Experience with this drug in pregnant women is inadequate to determine whether there exists a potential for harm to the developing fetus.

Use with CNS Depressants: Azatadine maleate has additive effects with alcohol and other CNS depressants (hypnotics, sedatives, tranquilizers, etc.).

Use in Activities Requiring Mental Alertness: Patients should be warned about engaging in activities requiring mental alertness, such as driving a car or operating appliances, machinery, etc.

Use in the Elderly (approximately 60 years or older): Antihistamines are more likely to cause dizziness, sedation, and hypotension in elderly patients.

PRECAUTIONS Azatadine maleate has an atropine-like action and, therefore, should be used with caution in patients with: a history of bronchial asthma; increased intraocular pressure; hyperthyroidism; cardiovascular disease; hypertension.

DRUG INTERACTIONS MAO inhibitors prolong and intensify the anticholinergic (drying) effects of antihistamines.

ADVERSE REACTIONS The most frequent adverse reactions are underlined:

General: Urticaria, drug rash, anaphylactic shock, photosensitivity, excessive perspiration, chills, dryness of mouth, nose, and throat.

Cardiovascular System: Hypotension, headache, palpitations, tachycardia, extrasystoles.

Hematologic System: Hemolytic anemia, thrombocytopenia, agranulocytosis.

Nervous System: Sedation, sleepiness, dizziness, disturbed coordination, fatigue, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, euphoria, paresthesias, blurred vision, diplopia, vertigo, tinnitus, acute labyrinthitis, hysteria, neuritis, convulsions.

Gastrointestinal System: Epigastric distress, anorexia, nausea, vomiting, diarrhea, constipation.

Genitourinary System: Urinary frequency, difficult urination, urinary retention, early menses.

Respiratory System: Thickening of bronchial secretions, tightness of chest and wheezing, nasal stuffiness.

OVERDOSAGE Antihistamine overdosage reactions may vary from central nervous system depression to stimulation. Stimulation is particularly likely in children. Atropine-like signs and symptoms (dry mouth; fixed, dilated pupils; flushing; and gastrointestinal symptoms) may also occur.

If vomiting has not occurred spontaneously, the patient should be induced to vomit. This is best done by having him drink a glass of water or milk after which he should be made to gag. Precautions against aspiration must be taken, especially in infants and children.

If vomiting is unsuccessful, gastric lavage is indicated within three hours after ingestion and even later if large amounts of milk or cream were given beforehand. Isotonic and ½ isotonic saline is the lavage solution of choice.

Saline cathartics, such as milk of magnesia, draw water into the bowel by osmosis and therefore are valuable for their action in rapid dilution of bowel content.

Stimulants should not be used.

Vasopressors may be used to treat hypotension.

FEBRUARY 1977 11055010

For more complete details, consult package insert or Schering literature available from your Schering Representative or Professional Services Department, Schering Corporation, Kenilworth, New Jersey 07033.

Schering Corporation
Kenilworth, New Jersey 07033

SWW-417 I

THINK DRY

Schering



THINK
OPTIMINE®
azatadine maleate, 1 mg. tablets

FIRST
for relief of allergy symptoms

℞ only

Please see adjacent brief summary of prescribing information.

Copyright © 1980, Schering Corporation. All rights reserved.

JEMPAC REPORTORIAL

New Jersey Medical Political Action Committee PAC

GETTING INVOLVED

The fact that ours is a government of, by and for the people does not mean that the majority of Americans actually determine the direction of government. Our political system responds to the majority of those actively trying to influence the process not to the majority of all people. Recognizing this step is the first step toward better government. The second step, if you want to be one of those affecting the direction of government—to be one of the governing rather than one of the governed—is to become one of those actively involved in politics.

A moderately effective and energetic volunteer in politics can influence a large number of fellow citizens. As one volunteer in politics, you can have a voting power a hundred times or more greater than your neighbor who casts a single ballot on election day, simply by getting voters favorable to your candidate to the polls who otherwise would not have voted.

What are some of the things that medical families can do in political campaigns?

Fund Raising—Doctors and their spouses are proved successful fund raisers. Contributions can be recruited successfully in large numbers from the medical community alone. If you really believe in a candidate, you will contribute to him first, then it will be easy to ask your colleagues in medicine to contribute also.

Opinion Making—Physicians and their spouses are leaders in the community. That's why people listen to them. If you believe in your candidate, talk to your colleagues and others about him. They will believe in that candidate also.

Volunteer Organization—There is one thing that candidates need and appreciate more than money: That one thing is quality workers. Doctors and their spouses can provide quality professional organizational skills to a candidate. Doctors and their wives can recruit volunteers, organize headquarters, give speeches, and provide resear for a candidate's campaign.

Three things must be done by medical family members order to have influence in government:

1. Give to JEMPAC and AMPAC. JEMPAC and AMPAC are t vehicles for your medical-political contributions.
2. Get involved, in a quality way, in a political campaign.
3. Contribute to your favorite candidate for public office.

JEMPAC: IT'S OFFICIAL—At the February meeting of t Board of Trustees of MSNJ, Frank Y. Watson, M.D Chairman of JEMPAC, requested and was granted autho ization for the establishment of a Political Action Committ to be connected with the Medical Society. The Truste further authorized the appointment of a Board of Directo to implement the following goals:

(1) To promote and strive for the improvement of government l encouraging and stimulating physicians, their spouses, and others take an active and effective part in governmental affairs.

(2) To encourage physicians and others to understand the natu and actions of government as to important political issues, and as the records of office holders and candidates for public office.

(3) To assist physicians and others in organizing themselves f more effective political action and in carrying out their civ responsibilities.

(4) To do any and all things desirable and necessary for t attainment of these goals and to promote a lively public interest good government.

JEMPAC MEMBERSHIP (4/25/80)

364 active, 32 sustaining.

Atlantic	1	Gloucester	10	Ocean	1
Bergen	67	Hudson	10	Passaic	1
Burlington	13	Hunterdon	2	Salem	
Camden	36	Mercer	21	Somerset	
Cape May	0	Middlesex	16	Sussex	
Cumberland	5	Monmouth	17	Union	7
Essex	48	Morris	24	Warren	

*The *JEMPAC REPORTORIAL* will be a monthly feature designed to inform members of MSNJ of PAC activities and to report issues of mutual concern. It is hoped this will heighten physician awareness of the need for participation in the political process. This item from JEMPAC was prepared by Frank Watson, M.D., and A. Ronald Rouse, who are, respectively, Chairman of the Committee and Executive Director and Editor.

— — — — — — — — — — — — — — — tear here — — — — — — — — — — — — — — —

Return to: JEMPAC Membership Registration
c/o MSNJ, Two Princess Road, Lawrenceville, NJ 08648

I wish to join JEMPAC in the following membership category and enclose my personal check in the amount of _____ . My spouse's full name is _____.

☐ Active member $35
☐ Active member and spouse $50
☐ Spouse only $15
☐ Sustaining member $100

Home Address _____
☐ Please send me the names and addresses of my state legislators and congressmen

Name _____ Address _____

Town _____ State _____ Zip Code _____

If your practice is incorporated, JEMPAC and AMPAC voluntary political contributions should be written on a PERSONAL CHECK. Contributions are not limited to the suggested amount. Neither the AMA nor the Medical Society of New Jersey will favor or disadvantage anyone based upon the amounts of or failure to make PAC contributions. Copies of JEMPAC and AMPAC reports are filed with the Federal Election Commission and are available for purchase from the Federal Election Commission, Washington, D.C. Contributions are subject to the limitations of FEC Regulations, Sections 110.1, 110.2 and 110.5. (Federal regulations require this notice).

Expand your office diagnostic capabilities

The BREON SPIROMETER

MODEL 2400



- As accurate as standard pulmonary laboratory instruments
- Easy and economical to operate
- Simple to interpret

You can see and test it for yourself in a five-minute personal demonstration. Just fill in and mail the coupon below.

BREON

BREON LABORATORIES INC.

Instrument and Life Support Division
90 Park Avenue
New York, N.Y. 10016

Mail to:

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Attn: M. Trepicchio

☐ Please send me more information about the Breon Spirometer Model 2400.

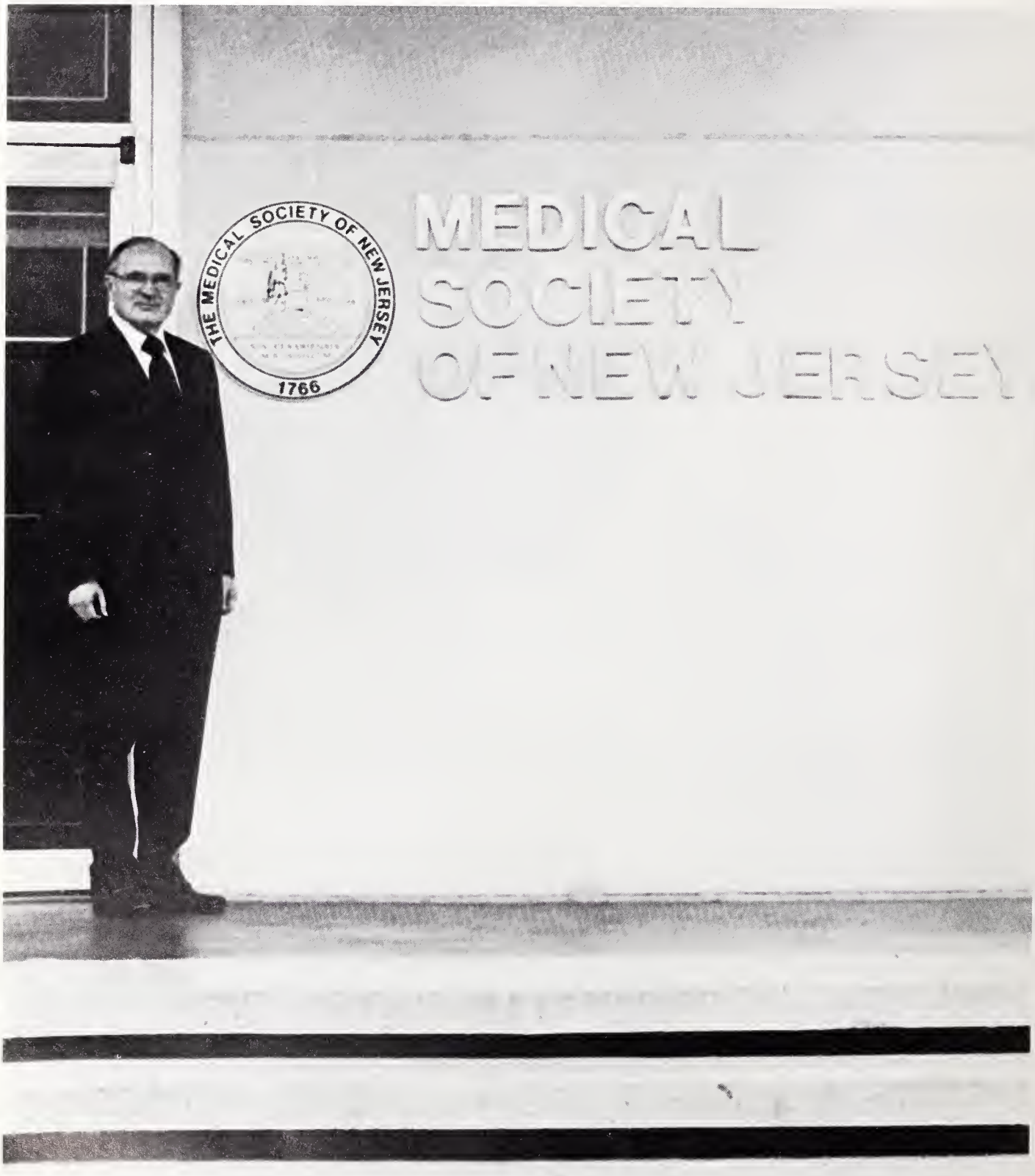
☐ Please have your representative call to arrange a personal demonstration.

Name_____

Address_____

City_____ State_____ Zip_____

Phone_____



Augustus L. Baker, Jr., M.D.
188th President, the Medical Society of New Jersey

Our Concerns for 1980-1981*

AUGUSTUS L. BAKER, JR., M.D., Dover

In 1980-1981 we are concerned about our image, as a group and as individuals. The cost of health care is important to us. Membership in MSNJ and in the AMA is critical to the primary physicians and to the specialist.

I am going to discuss some of our concerns with you briefly.

One of the problems facing the Medical Society today is not new, however, I would like to discuss it with you again because it is one we continue to face.

OUR IMAGE

If someone were to ask our patients what they thought of their doctor, he would get a very glowing report. As individuals, we are perceived by our paients as hard working, conscientious, interested in their problems, and well trained. I would dare say that most of them know that we are engaged in a program of continuing medical education and added up, we would be given a good mark. However, this is where the relationship to the medical profession ends. If the same patients were asked what they think of the medical profession, they perceive it as a cool, uninterested, overpaid and unavailable group.

How did we get this image as a group when we are highly esteemed as individuals in the community? The problem stems from the fact that the "good guys in white hats" don't make news, but one Medicaid fraud hits the headlines and seems to counterbalance the good deeds of the rest of the medical community. We should be on our guard and find the doctors who are giving us the bad image, then we may have them mend their ways before they get to the point where they create this situation.

To some extent one gets the same manifestation of distrust when one discusses government versus a certain politician or organized labor versus a certain union member. However, we should be on the lookout for the people who give us a bad image and try to inhibit their actions before that image spills over to affect all of us.

The second problem refers to positions that we take in the House of Delegates. I have noticed we frequently have asked the Medical Society of New Jersey to take positions that we as individuals would not maintain if we were acting alone. We are asking the House of Delegates to do our dirty work. As long as we do not have to be held accountable for our votes in the House, it is easy to fall into this trap. During the next two days when we are doing the business of the House of Delegates and acting on the reports of the reference committees, please keep this in mind.

HEALTH COSTS

In dealing with the economics of medicine, we again are perceived as being the problem. I am referring, of course, to the rising cost of medical care and the general hue and cry about doctors' fees. In this area we have made some headway. More and more, government agencies, officials, the general public and the media have come to realize that the doctors receive only 18 percent of the health care dollar.

*Inaugural address on the occasion of the author's induction into the presidency of the Medical Society of New Jersey. Presented before the House of Delegates, May 11, 1980, Secaucus, NJ.

There are many other areas where cost can be contained. In some of these areas, our cooperation is very important. This is particularly evident in the need to do more work in the outpatient areas, either in our office or in the hospital outpatient department. We should avoid hospitalization whenever treatment possibly can be done without interfering with the proper care of the patient.

To some extent, the increase in hospitalization was caused by the third party payers themselves, who, in the early days, were willing to do all of this care in the hospital. There has been an increase in the awareness of the third party payers of the outpatient approach and they are developing plans that will pay for a great deal of the work to be done without hospital admission. We should cooperate by not ordering inpatient care for people who can in any way possible be cared for as outpatients.

There are other factors which have increased the cost of medical care. One of them is the rise in spendable income—people are ready to use their money for their health and to seek medical attention for minor problems that they might have ignored in the past or for which they may have used self-treatment.

Another cause in the rise of care is the age distribution. There are more old people. Their presence means that there are more people susceptible to diseases which are prevalent in older people. These tend to be chronic and hard to treat; they require extra care and more hospitalization. Frequently, it includes not only more medical treatment, but more surgical treatment as well.

This brings to mind one of the methods that is being used in Great Britain to control this particular cost of medical care. The National Health Insurance in Great Britain refuses treatment for these people. Their attitude is, why operate on an 80-year-old lady who has stress incontinence when she is not going to live very long anyway. The buzz word is "not cost productive." I doubt if our American public would like this concept applied to medical care here. When we doctors try to point out this sort of deficiency in government-controlled medicine, it is immediately construed that our medical societies are taking a self-serving position. I feel that it is incumbent on us to make the public very aware that they are being sold second-rate medicine and *not* at a reduced cost. They should know that many forms of treatment are severely rationed under government-controlled medicine. Capital expenditures are reduced to the disappearing point. In England today (in some areas) they are using 100-year-old buildings that have wooden interiors which are unbelievable fire hazards; there is no intent to modernize hospital facilities.

A question: Is the certificate-of-need law beginning to do the same here?

Third party payment mechanisms, that eliminate or decrease direct payment at the time of service being rendered, reduce consciousness in cost of medical care and therefore tend to cause over utilization. We must continue to give high quality medical care no matter what the cost, but where we can, make a decision that will reduce the cost without changing the quality of medical care. It is incumbent on us to do so.

It is interesting that even the governmental programs that started Medicare and Medicaid in 1956 found that their cost increased rapidly; the cost almost doubled—from 22.4 billion to 42.6 billion—in the period from 1970 to 1978. It is interesting that tax policies that do not treat insurance premiums as taxable income have increased labor and management incentives for both greater depth of coverage and coverage for more individuals because it produces nontaxable income.

MEMBERSHIP CONCERNS

As you know, there has been some loss in membership related to a number of rather divergent factors. There were some of us who thought that continuing medical education was a personal thing, and should not be mandated by the Medical Society, so they dropped their membership. Whatever the merits of that position, we still feel that it is an important function of the Society and the hundred or so who dropped out for this reason, have their own consciences to guide them through the future of their education. In some cases the stand against the concept of continuing education was based upon the fact that they did not want to go to the trouble of filling out the forms, but a number have reconsidered this and have rejoined the Medical Society.

Raising the dues always caused a few people to resign—a rather short-sighted approach to the problem. The dues structure for our Society is certainly well within the parameters that other and even dissimilar societies charge their members for the activities of the society. I have noted that airline pilots are paying about $1800 a year for the actions of their society and while we do not serve exactly the same function, most of our activities are carried out at a far less rate.

There were large defections of members at the time that they no longer had to hold Medical Society membership in order to get their hospital privileges.

COMMUNICATION

In the last four or five years, there has been a noticeable increase in the number of our members who have been attending the monthly meetings of the Board of Trustees. We have been emphasizing this activity and hope that you will continue to send the president and president-elect of your county societies and representatives from your specialty societies to these meetings. At times it is extremely difficult to make a decision which has a particular impact upon either a specialty society or a county if we do not have the luxury of your input. On several occasions in the past, we have made decisions which later proved unpopular, but usually this was caused by the fact that no one from the affected group was in the audience at the time. The Board is more than willing to let anyone in the room discuss whatever motion is on the floor and I hope that the counties and specialty societies will continue to avail themselves of this opportunity.

WHAT DOES THE MEDICAL SOCIETY OF NEW JERSEY DO FOR YOU?

It represents your interest in the New Jersey Legislature where over 200 bills of medical interest are considered each session. There are four major state agencies that promulgate 300 to 500 rule proposals each year, all of which are subject to Society review and comment.

This Society provides you with scientific, economic, and political information and response, plus insurance and legal benefits specifically under our control. Two of the programs developed rapidly by the Medical Society of New Jersey were the professional liability insurance exchange and the prepaid legal plan. Where would we be without them?

WHAT DOES THE AMA DO FOR YOU?

It represents you before the U.S. Congress and federal

agencies. Several thousand bills in each session are reviewed and testimony on 700 bills is delivered. In excess of 10,000 regulatory proposals receive the same kind of review and treatment by AMA councils, committees, and staff. Our colleagues in England and Canada chose not to create and maintain an AMA-type association. Let's not repeat their error.

A second big area of concern of the AMA is education. They accredit medical schools, approve internships, residencies, and supervise and accredit continuing medical education programs. There are numerous other areas in which the AMA provides services for its members. When we ask, what does the AMA do for us? The AMA can confidently answer, "anything you need."

In closing, the Board of Trustees is considering an evaluation report of our Medical Societies' activities made by the American Society of Association Executives. Several areas in which meaningful assistance can be given to the county societies have been suggested. Copies of the report are being made available for the county societies and special committees within MSNJ.

We look forward to your continued enthusiastic support of your medical societies.

The primary beneficiaries of ORAL HYDERGINE® TABLETS, 1 mg (1 tab t.i.d.)

Each 1 mg Hydergine tablet contains dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a total of 1 mg.

They're in their late sixties, the beneficiaries of more liberal retirement laws and more enlightened attitudes toward the elderly. They're leading socially productive lives. But recently, without any clear cause, they had each begun to experience mild episodes of symptoms such as confusion, mood-depression, and dizziness. Their ability to function could have been jeopardized. That's when they became the beneficiaries of oral Hydergine therapy.



The still-functioning geriatric can benefit from Hydergine treatment

It is quite common for cognitive and emotional symptoms of deterioration to manifest gradually in the elderly. During this early stage, such symptoms are mild and more amenable to treatment. It is at this stage that Hydergine therapy has proved most effective. Patients tend to respond better, and with symptoms effectively relieved—or at least their progression retarded—the ability to function can be maintained.

Oral Hydergine tablets promote better patient compliance

Compared with the sublingual form, dosage administration is easier, with less need for supervision.

© 1979 Sandoz, Inc.

Contraindications: Hypersensitivity to the drug.
Precautions: *Because the target symptoms are of unknown etiology, careful diagnosis shou be attempted before prescribing Hydergine tablets and sublingual tablets.*
Adverse Reactions: Serious side effects have not been found. Some sublingual irritation, transient nausea, and gastric disturbances have been reported. Hydergine tablets and sublingual tablets do not possess the vasoconstrictor properties of natural ergot alkaloids.
Dosage and Administration: 1 mg three times daily. Alleviation of symptoms is usually gradual and results may not be observed for 3–4 weeks.
How Supplied: Hydergine tablets (for oral use) 1 mg, packages of 100 and 500.
Hydergine sublingual tablets 1 mg, containing dihydroergocornine mesylate 0.333 mg, dihydroergocristine mesylate 0.333 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.333 mg, representing a tota of 1 mg; packages of 100, 500, and 1000. **Hydergine sublingual tablets 0.5 mg,** containing dihydroergocornine mesylate 0.167 mg, dihydroergocristine mesylate 0.167 mg, and dihydroergocryptine (dihydro-alpha-ergocryptine and dihydro-beta-ergocryptine in the proportion of 2:1) mesylate 0.167 mg, representing a total of 0.5 mg; packages of 100 and 1000.
Before prescribing, see package insert for full product information.

SANDOZ PHARMACEUTICALS, EAST HANOVER, N.J. 07936

SANDOZ
SDZ 9-350

Role of Scalenotomy for Relief of Positional Vertebro-Basilar Ischemia

NICHOLAS J. DEMOS, M.D.,
HOWARD RUBENSTEIN, M.D., and
CARL RESTIVO, SR., M.D., Jersey City

Dizziness, vertigo, drop-out attacks, diplopia and other manifestations are frequent complaints of patients with positional vertebro-basilar ischemia, especially in the elderly. A good number of these patients will suffer ischemic stroke unless surgically corrected. Carotid endarterectomy should be performed where applicable, but a minority of patients will require surgical correction of the vertebral artery flow as described below.

Prevention of transient cerebral ischemic attacks has been carried out very successfully in the last two decades. Carotid endarterectomy is the most widely used technique, even in the presence of vertebro-basilar ischemic symptoms or vertebral artery deficiency, undoubtedly because of the larger blood flow it provides to the central cerebral pool of blood in the circle of Willis.

In the absence, however, of carotid lesion and in the clinical setting of symptoms of vertebro-basilar ischemia, the vertebral arteries have been operated upon. Vertebro-basilar ischemia may produce any or various combinations of symptoms such as drop-out attacks, bilateral paresthesia or paresis, vertigo, ataxia, diplopia, dysarthria, dizziness and syncope.

Reduction of vertebral arterial blood flow may occur, not only from arteriosclerotic occlusion or ulceration as in the carotid artery, but also as a result of extraluminal compression occurring from the complex movements of the neck.

Twenty-four vertebral artery revascularizations were included in an experience of 175 extracranial cerebral revascularizations (Table 1). Scalenotomy was performed in the course of the operative intervention in eleven of the 24 vertebral revascularizations. In seven of those eleven patients subclavian arteriotomy also was performed for anastomosis or endarterectomy or vertebral dilatation while in four instances no arteriotomy was performed. In the last four cases some dissection and division of periarterial constricting or restricting fibrous bands or nerves was performed around the vertebral artery in addition to section of the anterior scalenus muscle. In one patient both sides of the neck were operated on.

Whereas it may be difficult to know what led to postoperative improvement, review of these four case histories reveals a close relationship of scalenotomy and improvement.

CASE 1 (Two sides of neck)

For two years, while walking or driving, turning of his head to the side precipitated severe light-headedness in a 65-year-old man. This made it necessary for him either to sit down and rest or to stop his automobile immediately. On examination, unbearable dizziness and lightheadedness resulted from acutely turning his head to either side. Arch aortograms revealed 40 to 50 percent narrowing of the origin of the left vertebral artery and minor narrowing of the origin of the right vertebral artery. The carotid arteries were normal

*Presented at the First Annual Meeting of the New Jersey Vascular Society, Newark Beth Israel Medical Center, April 11, 1979. This study is from the New Jersey Medical School, CMDNJ, Newark, and Christ Hospital, Jersey City. Dr. Demos is Clinical Associate Professor of Surgery, New Jersey Medical School and Chief of Cardiovascular Surgery at Christ Hospital. Dr. Rubenstein is Chief of the Coronary Care Unit and Dr. Restivo is Chief of the Division of Family Practice, Christ Hospital. Correspondence may be addressed to Nicholas J. Demos, M.D., 921 Bergen Ave., Jersey City, N.J. 07306.

Table 1
Procedures Performed During Vertebral Revosculorization

Left Caratid-Left Subclavian Bypass	10
Scalenatamies and Trans-Subclavian Dilatatians	3
Scalenatamies and Adhesalyses	4
Scalenatamy, Subclavian and Vertebral Endarterectamy	1
Scalenatamy and Side-Ta-Side Vertebral-Subclavian Anastamasis	1
Scalenatamy and End-Ta-Side Vertebral-Subclavian Anastamasis	2
Innaminate-Rt. Subclavian Endarterectamy	1
Innaminate-Rt. Subclavian Patch Graft	1
Aarta-Ta-Rt. Subclavian and Rt. Camman Caratid Bypass	1

(figure 1). Bilaterial scalenotomies and dissection of the vertebral arteries have resulted in complete cessation of his symptoms for the past two years (figure 2).

CASE 2

A 57-year-old woman was incapacitated because of drop-out attacks of a few weeks' duration. The last one occurred while a chest x-ray was being taken. For the x-ray exposure she had to hold a deep breath and elevate her shoulders and her chin; she momentarily passed out and dropped down, but recovered immediately. On bedside examination the elevation of chin and shoulders and holding a deep breath produced disappearance of the right radial pulse and a drop-out attack while the electrocardiogram was unaffected.

Past history included a successful left carotid endarterectomy for left amaurosis fugax five months previously. Angiograms revealed corrected left carotid bifurcation and mildly stenotic origin of the right subclavian, vertebral and right internal carotid arteries (figure 3). At surgery a dacron patch was used to enlarge the origin of the right subclavian artery and all of the fibers of the hypertrophied and tense right scalenus anterior muscle were transected. The periarterial fibrous tissue was removed around the first part of the right vertebral artery. Postoperatively, the patient could take deep breaths freely and elevate her shoulders and chin without passing out. However, during these maneuvers, the right radial pulse disappeared as before.

Eleven months after the above surgery she had a transient two-day episode of left facial and arm weakness, slurred speech, vertigo and tendency to fall to the left. Right carotid endarterectomy was performed leaving her completel asymptomatic for one year.

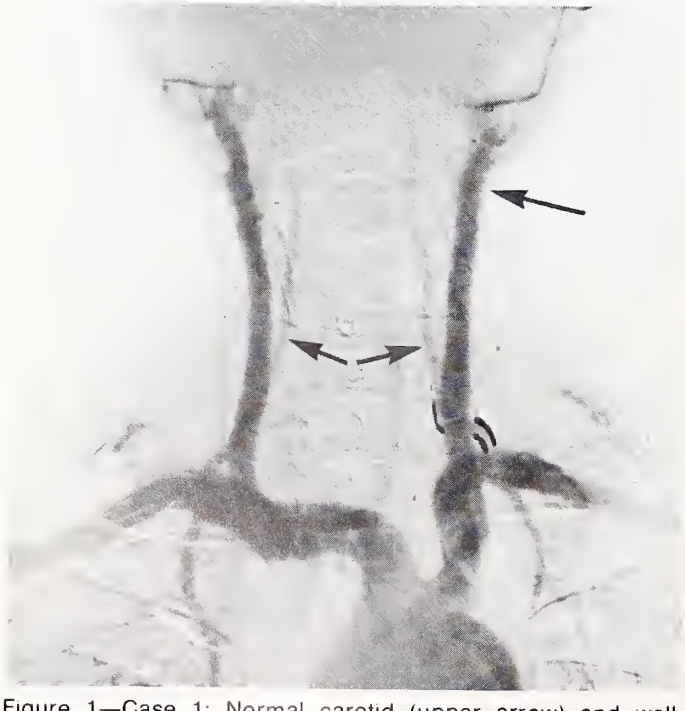


Figure 1—Case 1: Normal carotid (upper arrow) and well-developed vertebral arteries (lower arrows).

CASE 3

A 48-year-old man had transient episodes of bilaterall blurred vision and right arm and leg weakness. He als complained of severe dizziness on turning his head to the lef side. Angiograms revealed ulcerated right carotid atherom and moderate stenosis of the left vertebral artery (figure 4) An ulcerated right internal and common carotid atherom was removed. The dizziness on turning his head continued Two weeks later a left anterior scalenotomy and left vertebra periaterial dissection were performed. The patient has beer asymptomatic for two-and-a-half years.

DISCUSSION

The actions of the scalene muscles consist of bending the neck to the side and slightly forward and turning it toward the opposite side. Moreover, on deep inspiration, the scalene muscles elevate the first two ribs.[1] These actions are involved during the Adson maneuver, obliterating the radial pulse whenever the maneuver is positive.[2] For that reason, scalenotomy for thoracic outlet compression syndrome was used in previous years, before it was understood that the first rib also had to be removed to alleviate that particular syndrome.

However, the pinching action of the scalenes on the subclavian artery is somewhat different from their action on the vertebral artery. According to the anatomy seen during the eleven scalenotomies the posterior origin of the vertebral artery lies between the vertebral column posteromedially and the part of the subclavian artery anterolaterally covered by the anterior scalene muscle.[5] Turning of the head, in essence, more or less flattens that segment of the subclavian artery against the last cervical vertebra and its transverse process compressing the vertebral artery and kinking its origin. Thus, people with deficient intracranial anastomoses would suffer from vertebro-basilar insufficiency during the turning of the head. We actually have seen many elderly patients with cerebrovascular disease get dizzy with extreme head rotation, but they do not require an operation. However, the three

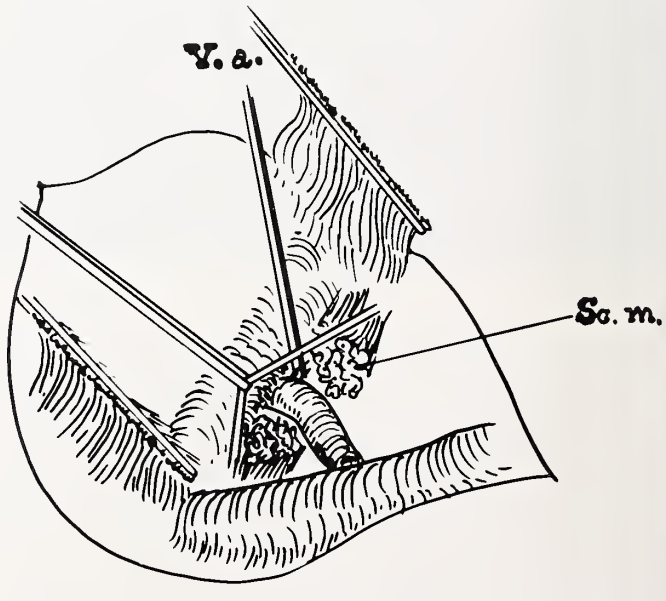


Figure 2— Supraclavicular exposure of the left vertebral artery, held by a rubber band (V. a.). The phrenic nerve is elevated by another rubber band (left). Sc. m. is the divided anterior scalene muscle. The sternocleidomastoid muscle has been divided between straight clamps.

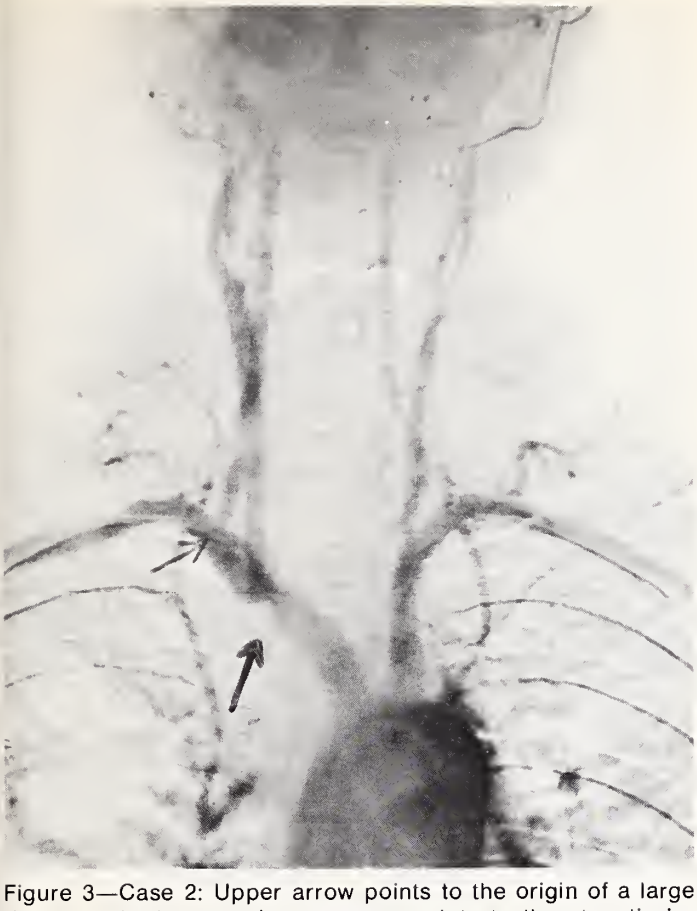


Figure 3—Case 2: Upper arrow points to the origin of a large right vertebral artery. Lower arrow points to the stenotic innominate-subclavian junction. See also the severe left internal carotid and the less severe right internal carotid stenosis.

patients reported here were severely symptomatic during their everyday activities.

The association of the specific action of the scalene muscles is prominently illustrated in patient #2. Holding a deep breath and elevation of her chin and shoulders obliterated her right (not the left) radial pulse; it precipitated her drop-out attack. The dramatic response of this patient during examination led us to correct the flow to the right vertebral artery. Later she required right carotid endarterectomy, but only after specific symptoms pointing to the right carotid artery arose.

Elongation of the artery with aging (figure 4), predisposes to kinking during head rotation and deep breathing. The elongation process involves the subclavian artery as well and causes upward arching while fibrous elements and the vertebral artery foramen hold the vertebral artery down, this accentuates the kinking.[4] That is the reason Wesolowski corrected the kinked vertebral artery by segmental subclavian resection and reanastomosis, an admittedly more extensive procedure.[5] Hurwitz[4] simply performed adhesolysis, and Bergner and colleagues corrected the vertebral stenosis by a subclavian-vertebral autogenous vein bypass.[6] What all three inadvertently and concomitantly have done, however, is a scalenotomy in addition to periarterial dissection.

Husni has shown angiographically how the turning of the head occludes the vertebral circulation even in patients as young as 27 years old. He treated his patients by clearing the tendinous ligaments around the vertebral artery entrance to the sixth vertebral foramen and by doing a careful scalenotomy.[7] He also advocated the interposition of a pedicle of nearby fat tissue between the artery and the longus colli muscle to prevent reattachment of the divided muscles. It is interesting that four of his 20 patients also had "scalenus anticus syndrome," stressing the role of this muscle in the



Figure 4—Case 3: Elongation of the first part of a dominant left, or only, vertebral artery quite easily conducive to kinking by turning of the head and scalene compression.

production of vertebral kinking.

A number of other authors have described intermittent vertebral arterial insufficiency but none stresses the importance of the anterior scalene muscle in the production of symptoms and its division to alleviate them.[8-14]

Production of positional vertebro-basilar ischemic symptoms related to the action of the scalene muscles require one or more of the following conditions: (1) the anatomy and pathology of the vertebral-subclavian-scalene complex must be conducive to vertebral kinking and/or compression, (2) the congenital anatomy and/or the acquired pathology of the circle of Willis must be such that intermittent compression of one vertebral artery temporarily deprives the midbrain of blood flow, and (3) additional extracranial carotid and/or vertebral artery arteriosclerosis or congenital vertebral artery hypoplasia may be present.

Since we became aware of the possibility of scalene compression of the vertebral artery, we have included the scalenus maneuver in our regular vascular examination for extracranial vascular disease.

SUMMARY

Surgical relief of transient cerebral vascular ischemic episodes is well established. Carotid endarterectomy is the most important primary operation performed. In a few instances however, the lesser but very important vertebral circulation needs repair. Symptoms of ischemia in this area include drop-out attacks, bilateral paresthesia or paresis, vertigo, ataxia, diplopia, dysarthria and syncope.

Among over 175 extracranial cerebral revascularization operations, four were performed successfully either primarily or after carotid endarterectomy failed to relieve the additional symptoms referable to ischemia of the vertebro-basilar territory. Complete anterior scalenotomy and periarterial dissection led to relief of symptoms. Because the symptoms in these instances were only positional, no direct attack of the

vertebral arterial wall was performed, even if a lesser degree of stenosis may have been present at the origin of the vertebral artery. Complete periarterial dissection of fibrous and nerve fibers was performed. At the time of surgery it was obvious from the healthy and pliable state of the artery that nothing more had to be done. Moreover, direct attack on as small a vessel as the vertebral artery may invite complete thrombosis.

The importance of the procedure is stressed in order to avoid in this limited number of cases direct arterial procedures for the relief of *positionally* triggered symptoms of vertebro-basilar ischemia.

REFERENCES

1. Anson BJ; *Morris' Human Anatomy,* 12th ed. New York, McGraw-Hill, 1966, p. 457.
2. Fairbairn JF II, Clagett OT: In: *Peripheral Vascular Diseases,* 4th ed. DF Fairbairn, JL Inergens, JA Spitell Jr., editors. Philadelphia, Saunders, 1972, p. 467.
3. Daseler EH, Anson BJ: Surgical anatomy of the subclavian artery and its branches. *Surg Gynec Obstet* 108:149, 1959.
4. Hurwitz, SA: Surgical treatment of partial extraluminal occlusion of the vertebral artery. *Surg Gynec Obstet* 143:257, 1976.
5. Wesolowski SA, Gillie E, McMahon JD, Santos DS, Cali JR, Vchida H: New arteriographic and surgical techniques for vertebral arteriopathies. *Circulation* (Suppl III, vol. 17 and 18) 111:211, 1973.
6. Berguer R, Andaya LV, Bauer RB: Vertebral artery bypass. *Arch Surg* 111:976, 1976.
7. Husni EA, Bell HS, Storer J: Mechanical occlusion of the vertebral artery: A new clinical concept. *JAMA* 196:475, 1966.
8. Cate WR Jr, Scott HW Jr: Cerebral ischemia of central origin: Relief by subclavian-vertebral artery thromboendarterectomy. *Surg* 45:19, 1959.
9. Crawford ES, DeBakey ME, Fields WS: Roentgenographic diagnosis and surgical treatment of basilar artery insufficiency. *JAMA* 168:509, 1958.
10. Hardin GA, Poster CM: Rotational obstruction of the vertebral artery due to redundancy and extraluminal cervical fascial band. *Ann Surg* 158:133, 1963.
11. Hardin GA, Williamson WP, Steegramn AT: Vertebral artery insufficiency produced by cervical osteoarthritic spurs. *Neurol* 10:855, 1960.
12. Hutchinson EC, Yates PO: Carotico-verterbral stenosis. *Lancet* 1:2, 1957.
13. Hutchinson EC, Yates PO: The cervical portion of the vertebral artery: A clinico-pathologic study. *Brain* 79:319, 1956.
14. Powers SR Jr, Drislane TM, Nevins S: Intermittent vertebral artery compression: A new syndrome. *Surg* 49:257, 1961.



Four out of five N.J. doctors participate!

Physicians statewide have teamed up with Blue Shield of New Jersey in the battle to control healthcare costs.

Their participation is proof-positive of a genuine commitment to our common goal... the best medical care at the lowest possible cost.

It's probably been a while since you have talked with your Blue Shield professional relations rep. Join us. *Call 456-3250.*

Give your patients the benefit of the best.

Blue Shield of New Jersey

THESE DAYS, INFLATION IS TAKING EVERYONE FOR A RIDE. HERE'S ONE WAY TO SLOW DOWN THE TRIP.



Set up a program of selling by phone.

Once it gets rolling, you may wonder how you ever did without it.

Especially since the cost of the average industrial sales visit now runs over $96.*

The person to see is your industry-trained New Jersey Bell Account Executive, who can summon a team of experts to train your people in moneymaking Bell System telephone selling techniques. Free.

True, selling by phone may not end all sales trips. But it can cut them down. And put to good use many of those long hours spent waiting in reception rooms or out on the road.

Will a program like this work for you? We think so. After all, it's worked for lots of others. And when you think of pouring $96 into every personal sales visit, you'll probably ask yourself not if you can afford to look into telephone selling.

But if you can afford not to.

Because what looks like a problem of increasing costs may turn out to be an opportunity for increasing sales.

And that's a pretty good way to slow down inflation's inroads.

*Source: McGraw-Hill Research.

PHONING. SOMETIMES IT'S BETTER THAN BEING THERE.

New Jersey Bell

Early Appearance of Laennec's Cirrhosis in Former Heroin Addicts on Methadone Maintenance

JOSEPH J. RYAN, M.D., Morristown*

Four former heroin addicts, for whom methadone was prescribed, dramatically increased their alcohol consumption and had a rapid onset of Laennec's cirrhosis. Increased hepatic sensitivity to alcohol, secondary to preexisting damage and/or interaction with smoldering viral hepatitis, are likely causes of the rapid progression to cirrhosis.

Liver disease in heroin addicts long has been cited as a principal complication of drug abuse.[1-6] Viral hepatitis is the most common hepatic sequela of intravenous drug abuse, but foreign body injection, bacteremia, poor nutrition and alcohol are implicated in the liver disease of many addicts.

The propensity of narcotic addicts toward multiple drug abuse also is well documented.[7-9] A large number of heroin addicts also abuse alcohol. Many investigators feel that the two addictions lead to more serious liver disease than abuse of either alone. A summary of the proceedings of a symposium on the medical complications of drug abuse cites a three-to-fourfold increase in the frequency of hepatic fibrosis in the drug abuser with hepatitis who drinks more than 32 ounces of alcohol a week, compared to those who drink less than ten ounces a week.[1] Autopsy studies show a significant incidence of alcoholic liver disease in addicts.[10,11]

The introduction of methadone hydrocholoride maintenance as a heroin substitute[12] has been accompanied by a reduction in the incidence of acute hepatitis.[13] While methadone prevents withdrawal symptoms, it does not provide the "high" to which many addicts have become accustomed. Increased use of barbituates and alcohol is seen in many on methadone maintenance programs.[13]

While liver biopsy studies of former addicts are few, severe alcohol-induced liver disease has not been prominent.[4-6] Many reports of alcoholic liver disease emphasize duration of drinking as well as quantity consumed in alcoholics who develop cirrhosis. Sherlock, Schiff and others note a 10-to-15 year history of heavy drinking in patients who develop cirrhosis. This paper describes four former addicts who began drinking heavily when started on methadone and developed frank cirrhosis within two years of the onset of their heavy drinking.

MATERIALS AND METHODS

The charts of 12 patients on methadone, known to be abusing alcohol, admitted to St. Vincent's Hospital and Medical Center of New York during a two-year period were reviewed. All 12 had abnormal liver function tests, but five had incomplete histories regarding drug or alcohol ingestion. Three patients had liver biopsies showing alcoholic hepatitis, fatty infiltration and mild portal fibrosis. Four others who had biopsies showing cirrhosis form the basis for this report.

Laboratory evaluation included liver enzymes (SGOT, LDH), bilirubin, alkaline phosphatase (AP), prothrombin time (PT), activated partial thromboplastin time (APTT), serum protein electrophoresis (SPEP), Australia antigen (HB_sAg) by counterimmunoelectrophoresis, anti-nuclear antibody (ANA), antimitochondrial antibody (AMA), anti-smooth muscle antibody (ASMA) and serology for syphilis

*Dr. Ryan is Assistant to the Chairman, Department of Medicine and Director of Gastroenterology, Morristown Memorial Hospital, Morristown, New Jersey. He may be addressed at the hospital, 100 Madison Avenue, Morristown 07960.

(VDRL). In addition, patients had hepatic scintiscan with technetium-99 and liver biopsy by Menghini technique. Results represent admission laboratory values except where indicated. Liver biopsies were evaluated according to the criteria described by Lischner.[20]

CASE REPORTS

Case 1—This was the first hospitalization for a 30-year old Puerto Rican male admitted November, 1973, with a one-month history of spontaneous daily nosebleeds. He had a 14-year history of heroin addiction but stopped this abuse when he was put on methadone maintenance, 100 mg/day, two-and-one-half years prior to admission. However, shortly after starting methadone, he increased his alcohol consumption from one-to-two beers per day to one-to-two pints of whiskey per day for several days during frequent periodic drinking sprees.

He noted scleral icterus and dark urine about one month prior to his admission, however, he was anicteric on admission. Hepatosplenomegaly was noted. Laboratory values included bilirubin 0.9, SGOT 74 units, albumin 2.3 g/dl, gamma globulin 1.90 g/100 ml.

Studies also showed iron deficiency anemia and hemoglobin AC. HB_sAg was negative as were the VDRL, ASMA, and AMA. Liver scan showed hepatosplenomegaly with irregular uptake. Liver biopsy nearly a month after admission showed extensive fibrosis and nodule formation, trace steatosis and no evidence of alcoholic hepatitis or hyalin.

Followup four months after discharge showed gamma globulin increased to 2.77 g/dl and SGOT 180 units. The patient subsequently had a massive GI hemorrhage for which he underwent mesocaval shunt at another hospital.

Case 2—The first admission for this 28-year-old white male was May, 1972, when he presented with a history of intermittent jaundice for about one year. He had a history of heroin addiction for eight years; he also used intravenous cocaine or oral cocaine-containing antitussives as they became available. In 1970, he stopped these "street drugs" and began methadone maintenance, taking 120 mg/day. One year prior to admission, he began drinking about six beers and/or a quart of wine a day. He had noted recent loss of appetite but denied exposure to hepatitis, needle use or change in cigarette habit over the past year. Bloods drawn during a clinic visit in June, 1971, disclosed a bilirubin of 1.9 mg/dl and an SGOT of 266 units.

Physical examination on admission revealed no spider angiomata, palmar erythema, gynecomastia, testicular atrophy or edema. The liver was recorded in excess of 20 cm. below the umbilicus and five finger breadths below the right costal margin in the anterior axillary line. There were no ascites.

The SGOT was 110 units, LDH 360 units/ml, total bilirubin 13.5 mg/dl with direct 11.5 mg/dl. AP was 25.3, the PT was 15.2 seconds with a control of 12.4 seconds, APTT was 47 with a control of 39 seconds. ASMA, AMA, latex fixation, HB_sAg and VDRL tests were negative. ANA was positive with a 1:6 titre. SPEP showed a reduced albumin (3.18 g/dl) and a diffusely increased gamma globulin (2.89 g/dl). Immunoglobulins were increased: IgG 4450 mg/dl, IgA 520 mg/dl, IgM greater than 1000 mg/dl.

Liver-spleen scan revealed hepatosplenomegaly with reduced uptake. Liver biopsy showed fibrosis with nodule formation, trace steatosis and mild alcoholic hepatitis. Liver function studies improved and the patient was discharged to be followed in medical clinic. He was readmitted four months later with weakness, jaundice, nausea and vomiting. He reported increased intake of beer and wine. He had not taken drugs aside from vitamins and methadone. Liver size essentially was unchanged; he now had spider angiomata. The SGOT was 126 units, the AP 26 units, bilirubin 14.5 mg/dl total, 12.0 mg/dl direct and the Pt 16.2/11.2. The gamma globulin had increased to 3.90 g/dl. HB_sAG, AMA and ASMA continued negative.

Case 3—In October, 1973, a 31-year-old black male was admitted for evaluation of abdominal swelling. He had a ten-year-history of heroin abuse until starting methadone two years prior to admission. His methadone dose had been tapered from 120 mg/day to 20 mg/day over the period and his "irregular" use of ale had increased to the point where he now was drinking four to five quarts a day.

Examination revealed a 22 cm liver span with a tender, smooth edge. Ascites were present. The SGOT was 114, bilirubin 1.0 g/dl, albumin 3.1 g/dl and gamma globulin 3.78 g/dl. HB_sAg, ANA, ASMA were negative. Hepatic scan showed hepatomegaly with irregular uptake. The liver biopsy showed extensive fibrosis with nodule formation, trace steatosis and no alcoholic hepatitis or hyalin.

Case 4—A 29-year-old Puerto Rican male first was admitted in April, 1972 with pleurisy. He had a four-year history of heroin addiction; he stopped heroin and had been in a methadone maintenance program for the past 17 months (110 mg methadone/day). A year prior to admission he had started drinking four-to-five pints of wine per day. There was no hepatosplenomegaly, SGOT was 22, bilirubin 1.5 mg/100 ml.

He was readmitted September, 1972, with a history of jaundice, anorexia, ankle edema and vomiting for two weeks. He had continued drinking heavily but had stopped methadone four months prior to admission. Physical examination was unchanged except for scleral icterus and a 20 cm. liver extending four finger breadths below the right costal margin with a smooth, mildly tender edge. The spleen was not palpable; there were no ascites. The stool was negative by Hematest®. The admission bilirubin of 27 mg/dl rapidly decreased to 5.5 mg/dl total with 5.0 direct. LDH was 614 u/ml and SGOT was 145. HB_sAg, ANA, AMA and latex were negative. ASMA was positive. The albumin was 2.47 g/dl, and gamma globulin 2.44 g/dl. Liver biopsy in October, 1972 revealed fibrosis, nodule formation, moderate steatosis and alcoholic hepatitis.

The patient continued drinking and was admitted with anorexia, nausea and vomiting and jaundice in February, 1973. The liver was now 14 cm. in span in the right midclavicular line. Liver function studies revealed an SGOT of 229, LDH 364, bilirubin 13.4 total with 11.3 direct, AP 10.3 and PT 18.1 sec with 12.3 sec control. Over a one-month hospital course the patient's symptoms abated; at the time of discharge SGOT was 115 and bilirubin 2.3.

He was readmitted in June, 1973, with jaundice and hematemesis, having increased his wine consumption to two quarts a day. Sclerae were icteric and he had numerous angiomata, ascites, a 22 cm. tender liver and occult blood in his stools. Admission SGOT was 204, bilirubin 23 total with 17 direct, AP 28.5 and PT 19.5/12.5 sec control. Serum ammonia was 254 mg/dl. Serum creatinine which was normal in 1972, was 9.3 mg/dl. HB_sAg, ANA, AMA and ASMA were negative. The patient went into coma, deteriorated steadily, developed a massive gastrointestinal hemorrhage and expired in July, 1973. The liver at autopsy

Table 1
Duration and Amount of Alcohol Abuse Before Onset of Cirrhosis

Patient	Age (yeors)	Estimoted gm Ethanol/day*	Cirrhosis on Biopsy (months)
#1	30	240	24
#2	26	84	12
#3	31	128	18
#4	29	192	18
Averoge	29	161	18

*whiskey – 10 gm ethonol in 1 oz (43%)
wine – 3 gm ethanol in 1 oz (12%)
beer – 1 gm ethanol in 1 oz (5%)

showed extensive fibrosis and nodularity.

COMMENTS

Why did the patients described above develop advanced alcoholic liver disease so rapidly? We believe several possibilities should be considered: (1) perhaps the patients were drinking far longer than they admitted; (2) they may have had preexisting liver disease which made them more vulnerable to the effects of alcohol; (3) HB_sAg may play a role in the development of alcoholic liver disease; (4) methadone itself may increase hepatic sensitivity to the effects of alcohol.

Perkins, in his survey of a New York City methadone maintenance program, found that ten percent of the patients had an alcohol problem prior to admission to the program and eight percent continued heavy drinking through their first year in the program.[15] Kreek, in her survey of 92 addicts on methadone, reported that 12 percent drank alcohol to excess.[9] Both these reports represent early experience with methadone maintenance and may reflect under-reporting of alcohol abuse by patients for fear of being dropped from the program. Freed found alcohol abuse in 20 percent of 15,000 patients using addicting drugs.[7] It is significant, in this report, that all patients dated the onset of their heavy ethanolism to a point after starting methadone maintenance.

While none of these patients had a previous history of jaundice or hepatitis, pre-methadone liver function studies are not available. Cherubin has demonstrated persistent transaminase elevations in former narcotic addicts up to a year after cessation of intravenous drug use.[2] Biopsies of 16 patients with liver function abnormalities a year after entering a drug-free program revealed only three with normal livers.[16] Half of Cherubin's autopsy series of addicts had chronic hepatitis with an additional 32 percent showing a non-specific hepatitis. Rosenblate found viral hepatitis in three of 50 asymptomatic former heroin addicts on methadone maintenance and a lymphocytic portal infiltrate in 45 others.[3] Surprisingly, he did not describe chronic liver disease in any patients. Inflammation, then, is common, even in asymptomatic addicts.

Studies of the factors determining liver damage in chronic alcoholics emphasize amount and duration of alcohol abuse. Leevy has stressed the role of malnutrition seen in many with alcoholic liver disease,[17] but Rubin and Lieber have demonstrated the hepatotoxic effect of alcohol in well-nourished primates.[18] The role of coexistent or previous viral hepatitis is unclear. In 1947, Howard and Watson found 17 patients with a history of hepatitis in a survey of 100 patients with Laennec's cirrhosis.[19] This observation was supported by Pettigrew *et al.*, who demonstrated positive lymphocyte transformation to HB_sAg in patients recovering from

"Studies of the factors determining liver damage in chronic alcoholics emphasize amount and duration of alcohol abuse."

hepatitis B infection and in patients with biopsy-proved alcoholic liver disease and negative results in primary biliary cirrhosis, chronic active hepatitis and in alcoholics with normal liver function.[20] Race, too, may play a role; Whaley and Golombos reported an increased frequency of HB_sAg positivity and hepatitis in white addicts compared to black addicts.[21]

Evidence for a hepatoxic effect of methadone is weak. Kreek, in a review of 129 patients on methadone maintenance for over three years, found no evidence of declining liver function.[9] There remains the possibility that methadone potentiates the effect of alcohol.

Unless supported by objective measurement of drug use, any study of multiple drug abuse is subject to inaccuracies of patient history. The exact onset of heavy drinking (more than 70 g/day) is rarely precise in any study of alcoholics.[14] Nevertheless, since the incidence of cirrhosis is only eight to ten percent in alcoholics and studies of cirrhotics show only a small incidence in patients drinking less than five years,[22] the onset of advanced liver disease in the patients presented above is striking (see table).

Nutrition, host response to toxins and previous viral hepatitis are all thought to play a role in the development of Laennec's cirrhosis. The importance of the amount and duration of excessive ethanol ingestion also has been emphasized. The difficulty in diagnosing viral hepatitis in a liver showing steatosis and portal fibrosis is the likely basis for the purported paucity of viral hepatitis in patients with alcoholic liver disease. The advent of serologic confirmation for hepatitis A and B infection will allow a reevaluation of this problem.

Freed cited a 20 to 50 percent incidence of ethanol abuse among drug addicts.[7] Perkins noted that ten percent of patients accepted into a methadone maintenance program had a "problem" with alcohol[15] and Liebson noted that up to 20 percent of those in methadone programs become problem drinkers.[23] Yet some biopsy and autopsy reports have not shown evidence of a major role for alcohol in the liver disease of addicts.[3,4-6,16] This may be due in part to early series reporting biopsies of addicts after months to years in prison, when they presumably were denied ethanol.

"Nutrition, host response to toxins and previous viral hepatitis are all thought to play a role in the development of Laennec's cirrhosis."

"Continued evaluation of both liver function and alcohol abuse is warranted in patients on methadone maintenance. Further investigation into the interaction between alcoholic and viral liver disease is indicated."

Stimmel, in a survey of 46 former heroin addicts on a methadone maintenance program, found HB_sAg in 44 percent. This contrasts to a less than five percent incidence of HB_sAg positivity in an even larger series by Clark and suggests marked variation in different addict populations.[24] In Stimmel's study, 14 patients without evidence of hepatitis B infection had persistence of abnormal liver function tests over the first year on methadone and biopsies revealed evidence of alcoholic liver disease in ten of 12 patients biopsied. Portal fibrosis or cirrhosis was not seen. Helpern, in a large autopsy series of narcotic addicts,[10] and Baden, in a small series of deaths on methadone maintenance,[11] suggest alcoholism contributed to the death of 10 to 25 percent of addicts who expired.

Liebson used the reinforcing quality of methadone to treat the combined alcohol-methadone abuser.[23] In a small series, he demonstrated a reduction in drinking in patients on methadone maintenance who were required to take disulfiram before receiving methadone, compared to self-controls, whose use of methadone was not contingent on taking disulfiram. Continued evaluation of both liver function and alcohol abuse is warranted in patients on methadone maintenance. Further investigation into the interaction between alcoholic and viral liver disease is indicated.

SUMMARY

Laennec's cirrhosis develops in only ten percent of heavy alcohol users, usually after a decade or more of alcohol abuse. Nutrition, host reponse and previous viral hepatitis are all thought to play a role in the development of Laennec's cirrhosis.

This paper describes four former heroin addicts who began drinking heavily when started on methadone, and who developed cirrhosis within two years of the onset of their heavy drinking. This lends support to the concept that previous exposure to viral liver disease may sensitize the liver to the toxic effects of alcohol.

Acknowledgement

I would like to thank Dr. James G. Robilotti, Jr., for his help in case selection and Dr. John F. Gillooley, Assistant Director of the Department of Pathology at St. Vincent's Hospital and Medical Center of New York, for reevaluating the biopsy material.

REFERENCES

1. Johnson R, Lukash W, editors: Medical complications of drug abuse. Special Action Office for Drug Abuse Prevention, Washington, 1973.
2. Cherubin C, Kane S, Weinberger D, Wolfe E, McGinn T: Persistence of transaminase abnormalities in former drug addicts. *Ann Intern Med* 76:385, 1972.
3. Rosenblate H, Eisenstein R, Baldwin D, Holmes A: Nonviral hepatitis in drug addicts. *Arch Path* 95:18, 1973.
4. Kaplan K: Chronic liver disease in narcotics addicts. *Am J Dig Dis* 8:402, 1963.
5. Rutherdale J, Medline A, Sinclair J, Buchner B, Olin J: Hepatitis in drug users. *Am J Gastroenterol* 58:275, 1972.
6. Levine R, Payne M: Homologous serum hepatitis in youthful heroin users. *Ann Intern Med* 53: 164, 1960.
7. Freed E: Drug abuse by alcoholics: A review. *Intern J Addict* 8:451, 1973.
8. Stimmel B, Vernace S, Tobias H: Hepatic dysfunction in heroin addicts: The role of alcohol. *JAMA* 222:811, 1972.
9. Kreek M, Dodes L, Kane S, Knobler J, Martin R: Long-term methadone maintenance therapy: Effects on liver function. *Ann Intern Med* 77:598, 1972.
10. Helpern M, Rho Y: Deaths from narcotism in New York City. *NY J Med* 66:2391, 1966.
11. Baden M: Methadone-related deaths in New York City. *Intern J Addict* 5:489, 1970.
12. Dole V, Nyswander M: A medical treatment for diacetylmorphine (heroin) addiction: A clinical trial with methadone hydrochloride. *JAMA* 193:646, 1965.
13. Erikson J: Methadone maintenance treatment of opiate addicts in Sweden. Proceedings of Third National Conference on Methadone Treatment, National Institute of Mental Health, U.S. Government Printing Office, 1970.
14. Lischner M, Alexander J, Golombos J: Natural history of alcoholic hepatitis: I-the acute disease. *Am J Dig Dis 16:481, 1971.*
15. Perkins M, Bloch H: Survey of a methadone maintenance treatment program. *Am J Psychiat* 126:1389, 1970.
16. Cherubin C, Rosenthal W, Stenger R, Prince A, Baden M, Strauss R, McGinn T: Chronic liver disease in asymptomatic narcotic addicts. *Ann Intern Med* 76:391, 1972.
17. Leevy C, Tamburro C, Smith F: Alcoholism, drug addiction and nutrition. *Med Clin N Amer* 54:1567, 1970.
18. Rubin E, Lieber C: Fatty liver, alcoholic hepatitis and cirrhosis produced by alcohol in primates. *N Engl J Med* 290:128, 1974.
19. Howard R, Watson C: Antecedent jaundice in cirrhosis of the liver. *Arch Intern Med* 80:1, 1947.
20. Pettigrew N, Russell R, Goudie R, Chaudhuri A: Evidence for a role of hepatitis virus B in chronic alcoholic liver disease. *Lancet* 2:724, 1972.
21. Whaley W, Golombos J: Race and risk of hepatitis in narcotics addicts. *Am J Dig Dis* 18:460, 1973.
22. Eghoje K, Juhl E: Factors determining liver damage in chronic alcoholics. *Scan J Gastroenterol* 8:505, 1973.
23. Liebson I, Bigelow G, Flamer R: Alcoholism among methadone patients: A specific treatment method. *Am J Psychiat* 130:483, 1973.
24. Clark M, Lewis J: Incidence of hepatitis-associated antigen among patients in a methadone clinic. *S Med J* 66:389, 1973.

Blue Chip Investment Opportunity. Build your own office.

A properly designed, built and managed Medical/Dental Office Building is a Blue Chip Investment which rivals gold.

Regardless of the organization of your practice—private or group, partnership or corporation—the benefits of building your own office are many-fold. Economic and working-condition advantages can be maximized when the total Medical/Dental Office Building package is put together properly. And, because of your income and tax situation, you can benefit particularly in relation to equity and depreciation allowances available to you. Danladi Development Corporation's unique Design/Build Concept cashes in on the golden opportunity of investing in your own Medical/Dental Office Building.

Money is tight, interest rates are high; but if you know the proper channels most projects can be financed at well below normal interest rates. You might be surprised how little it costs.

Traditional building methods take too much of the medical practice's time and money. Zoning; site surveys; hire architects; site studies; space planning; preliminary plans; leasing and management; financing; final plans; and then you are only ready to begin the bidding and eventual construction process. It takes too long. Every day lost in today's changing economy costs you money in interest and escalating costs.



The Design/Build Concept used by the Danladi Development Corporation minimizes the time doctors must lose from their practice and maximizes time-saving construction techniques. This is only possible when architectural, engineering, and building responsibilities are combined.

Historically no investment is as stable as real estate. Real Estate provides utility, tax benefits, and long term growth potential. Let us show you how we can use our expertise and experience to make the Danladi Design/Build Concept work for you.

Call us or mail this coupon today.

DANLADI
DEVELOPMENT
CORPORATION

SUITE 1015
3701 N. BROAD ST.
PHILADELPHIA PA. 19140
215·223·1400

To: Danladi Development Corporation
Suite 1015, 3701 N. Broad Street
Philadelphia, PA 19140

☐ Please contact me with more information on building my own office now.

NAME _____

ADDRESS _____

CITY _____

STATE _____ **ZIP** _____

PHONE _____

Interaction of Coexisting Primary Hypogonadism and Polycythemia Rubra Vera*

G.N. KRISHNA REDDY, M.D., SHEILA NAGAR, M.D. and
SIDNEY TRUBOWITZ, M.D., East Orange

A 61-year-old man with primary hypogonadism was shown to have polycythemia rubra vera, despite a normal red cell mass. Replacement with testosterone resulted in a dramatic increase in the red cell mass as well as in the white cell count. Androgens apparently can stimulate erythropoiesis and granulocytopoiesis in polycythemia vera. Androgens probably act on both normal and abnormal stem cells in polycythemia rubra vera. Hypogonadism may mask some of the manifestations of polycythemia vera and delay its early recognition.

Polycythemia rubra vera (PV) has been defined as an autonomous, proliferative disease of the marrow characterized by an unregulated increase in all of the blood cell elements. Androgens and related hormones are known to have a stimulatory effect on the normal marrow. The higher hemoglobin levels in men have been attributed to the higher levels of testosterone. Information on the effect of androgens on the marrow in PV is scanty. The presence of primary hypogonadism and PV in the same individual afforded an opportunity to observe the effects of hypogonadism on the clinical features of PV, the morphologic appearance of the marrow and the hematologic responses to replacement therapy with testosterone.

CASE REPORT

A 61-year-old man was admitted to the endocrine section of the East Orange VA Medical Center in October 1977 for evaluation of impotence, infertility and gynecomastia. The patient described normal libido and potency until 1974, followed by a gradual decline leading to complete impotence for the past three years. Gynecomastia was first noticed in 1977 and has been stable.

Past History—The patient was treated for congenital syphilis at age ten with bismuth and arsenic and retreated at age 19 with penicillin for a positive VDRL. A semen analysis at that time was azospermic. There was no history of urologic infection or trauma. Puberty was described as normal, occurring at age 14.

The patient had a history of ischemic heart disease, essential hypertension, compensated congestive heart failure and a cerebrovascular accident. Current medications include digoxin, hydrochlorothiazide, alpha-methyl dopa and allopurinol. He smoked one pack of cigarettes per day for 40 years and continued to smoke at that rate during the period of observation. He denied alcohol abuse.

PHYSICAL EXAMINATION

Physical examination revealed a plethoric, obese man—height: 67-1/2, span: 65-1/4, weight: 211 pounds, blood pressure: 150/80. There was moderate diffuse, bilateral gynecomastia, non-tender and without galactorrhea. Heart and lungs were unremarkable. Both liver and spleen were palpably enlarged and firm. Penis was normal, testes were both small and soft (approximately one cm each). Hair pattern was female.

LABORATORY DATA

Laboratory data showed hemoglobin 16.7, hematocrit 49.4%, white blood cells 12.200, with 70% segs and 30%

*This study is from the endocrine and hematology sections, medical service, Veterans Administration Medical Center, East Orange. Drs. Reddy and Nagar were fellows at this facility at the time the paper was prepared. Dr. Trubowitz is chief of the hematology section and may be addressed at the Veterans Administration Medical Center, East Orange 07019.

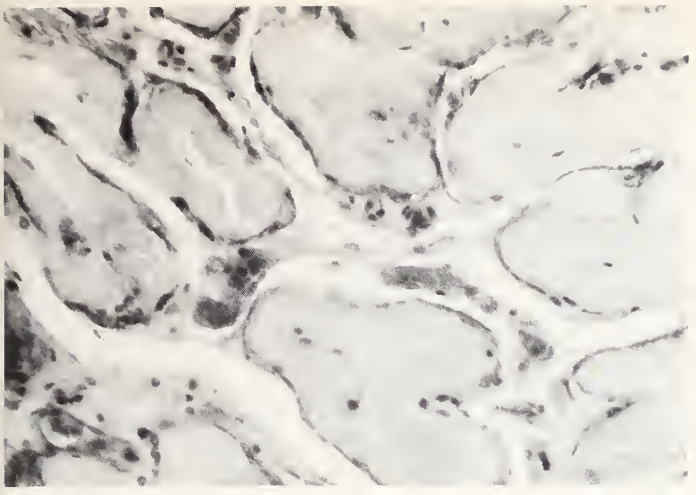


Figure 1—Testicular biopsy showing markedly sclerotic tubules. Hematoxylin-Eosin stain, original magnification x 450.

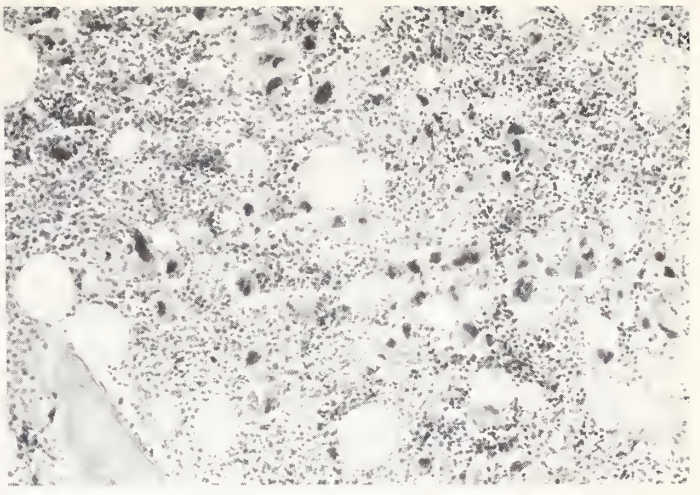


Figure 2—Bone marrow biopsy showing markedly hyperplastic marrow with increased megakaryocytes. Hematoxylin-Eosin stain, original magnification x250.

lymphs, platelet count 515,000, and serum electrolytes normal. Endocrine studies revealed serum T3 185 ng/dl (normal 80 to 220), serum T4 8 ng/ml (normal 4 to 12), serum luteinizing hormone 52 mIU/ml (normal 5 to 20), serum follicle stimulating hormone 58 mIU/ml (normal 5 to 20), serum testosterone 100 ng/dl (normal 300 to 1,000) and serum prolactin 3.8 ng/ml (normal 5 to 15), 24-hour urine 17 ketosteroids 6.4 mg (normal 5 to 20), 24-hour urine 17 hydroxycorticosteroids 4.5 mg (normal 4 to 14), serum androstenedione 22 ng/dl (normal 50 to 200).

Testicular biopsy revealed sclerotic tubules with small clusters of Leydig cells (Figure 1). Buccal smear revealed no Barr bodies. Chromosomes: XY in the peripheral blood and in skin fibroblast culture.

The initial diagnostic impression was primary hypogonadism of unknown etiology.

A hematology consultation was requested because of the persistent leukocytosis, thrombocytosis and splenomegaly; and the possibility of co-existing polycythemia vera was strongly considered.

Hematologic and other laboratory studies revealed serum B_{12}630 pg/ml (normal 200 to 1100), leukocyte alkaline phosphatase score 136 (normal 38-80), hemoglobin electrophoresis AA pattern, hemoglobin F 1.3%, A2 3.6%, red cell mass (Cr^{51}) 26 cc/kg (normal 25 to 35). Arterial blood gases showed pH 7.38, PO_2 71.4, pCO_2 43, HCO_3 24.5, oxygen saturation 93%; P5026 mmHg (normal 27 to 28). Carboxyhemoglobin 7.3% (normal up to 2%). Liver-spleen scan revealed spleen enlarged three to four times normal.

Bone marrow biopsy (Figure 2) showed marked hyperplasia with almost complete disappearance of fat. Myeloid-erythroid ratio was essentially normal; the marrow was highly suggestive of polycythemia vera. Intravenous pyelogram and brain scan were normal.

CLINICAL COURSE

The patient was treated with testosterone replacement: Depo-Testosterone® propionate 200 mg intra-muscularly, biweekly. A steady and significant parallel rise was noted in white blood cell count, hematocrit and red cell mass (Figure 3). Platelet counts were variable and did not rise significantly. Testosterone therapy was discontinued when the patient began complaining of headaches and dizziness that were attributed to the marked increase in red cell mass. Blood values promptly returned to pre-treatment levels with resolution of symptoms.

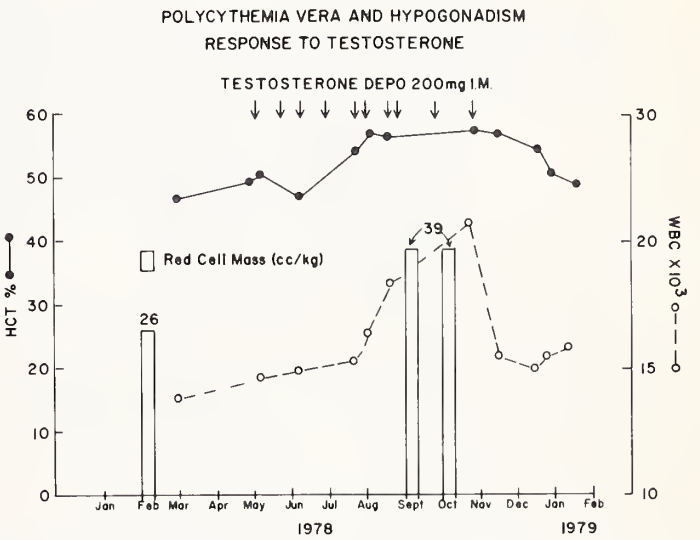


Figure 3—Red cell mass, hematocrit and white blood cell counts prior, during, and after treatment with testosterone.

DISCUSSION

Androgens and related hormones stimulate erythropoiesis in the experimental animal and in man.[1-5] Androgens stimulate erythropoiesis in man, and have been shown to increase red cell production in the polycythemic mouse as well. [6,7]

Little information is available on the effects of androgens on hematopoiesis in PV. Erythropoiesis on PV has been thought to be autonomous and unresponsive to the feedback control of erythropoietin. Recent culture studies of the bone marrow of patients suffering from PV suggest that the erythroid precursors in PV do maintain responsiveness to erythropoietin modulation.[8,9] Androgens presumably mediate their effects on erythropoiesis through erythropoietin production, as well as by direct action on the erythroid colony forming units[10-12]. The striking response in red cell mass to androgen replacement therapy in our patient supports the view that erythropoiesis in PV is capable of responding to hormonal stimulation.

Of further interest is the observation that the granulocyte count of our patient rose by some 50 percent during the course of testosterone administration and fell very promptly to pre-treatment levels following cessation of treatment. Crafts castrated male rabbits and found no change in the white cell count or differential.[1] On treatment of the castrate with testosterone propionate, no change in white blood cell

". . .hypogonadism effectively can reduce the expanded red cell mass of PV and mask the symptoms of this disease."

"Treatment of hypogonadism with androgens stimulates an expansion of the red cell mass and the symptoms of hyperviscosity become manifest."

count was noted. McCullogh and Jones studied the effects of androgens on the blood counts of eunuchoid patients. [13] They noted a rise in the red cell count but no change in the white cell count following prolonged administration of testosterone propionate or methyl testosterone. There is little reported information to suggest that testosterone stimulates normal granulocytopoeisis. The temporal relationship between the testosterone administration and changes in the white blood cell count in our patient suggests the possibility that androgens may have a stimulatory effect on the granulocyte precursors of PV.

Thus, it is apparent that hypogonadism effectively can reduce the expanded red cell mass of PV and mask the symptoms of this disease. However, the objective features of PV remain, namely, marked hyperplasia of the bone marrow, elevation of the white blood cell and platelet counts and enlargement of the spleen. Treatment of hypogonadism with androgens stimulates an expansion of the red cell mass and the symptoms of hyperviscosity become manifest. PV is, by current definition, a clonal disease in which both normal and PV stem cells reside in the marrow. It can be argued that the rise in red cell mass seen in our patient was due primarily to the action of the androgen on the normal stem cells. But, *in vitro* studies of bone marrow culture from patients with PV have shown that both the normal and abnormal stem cells respond to stimulation by erythropoietin.[14] Furthermore, such expansion of the red cell mass in the normal man following androgen administration is not seen. The normal stem cell undoubtedly was stimulated by testosterone, but it seems unlikely that the demonstrated expansion of the red cell mass could have taken place without stimulation of the PV stem cells as well.

REFERENCES

1. Crafts Roger C: Effects of hypophysectomy, castration, and testosterone propionate on hematopoiesis in the adult male rat. *Endocrinol* 39:401-413, 1946.
2. Vollmer EP, Gordon AS: Effect of sex and gonadotropic hormones upon blood picture of the rat. *Endocrinol* 29:828-839, 1941.
3. Vollmer EP, Gordon AS, Charipper HA: Effects of hormones on erythropoiesis in hypophysectomized rat. *Endocrinol* 31:619-628, 1942.
4. Steinglas P, Gordon AS, Charipper HA: Effects of castration and sex hormones on the blood of rats. *Proc Soc Exptl Bio* and *Med* 48:169-177, 1941.
5. Kennedy BJ, Gilbertson AS: Increased erythropoiesis induced by androgenic hormone therapy. *N Engl J Med* 256:719-725, 1957.
6. Naets JP, Wittek M: The mechanism of action of androgens on erythropoiesis. *Ann N Y Acad Sci* 366-376, 1968.
7. Samuels AI, Fisher JW: Erythropoietic effect of 5 and 5 steroids. *Fed Proc* 30:203, 1971.
8. Golde DW, Bersch N, Cline MJ: Polycythemia vera: Hormonal modulation of erythropoiesis *in vitro*. *Blood* 49:399-405, 1977.
9. Golde DW, Cline MJ: Erythropoietin responsiveness in polycythemia vera. *Br J Haematol* 29:567-573, 1975.
10. Moriyama Y, Fisher James W: Increase in erythroid colony formation in rabbits following the administration of testosterone. *Pro Soc Exptl Bio and Med* 149:178-180, 1975.
11. Gordon AS, Mirand EA, Wenig J, Katz R, Zanjani ED: Androgens in erythropoiesis. *Ann NY Acad Sci* 318-335, 1968.
12. Gorshein D, Hait WN, Besa EC, Jepson JH, Gardner FH: Rapid stem cell differentiation induced by 19 nortestosterone decanoate. *Br J Haematol* 26:215-224, 1974.
13. McCullogh EP, Jones R: Effect of androgens on the blood count of men. *J Clin Endocrinol* 2:243-251, 1942.
14. Prchal JF, Adamson JW, Murphy S, Steinmann L, Fialkow PJ: Polycythemia vera, the *in vitro* response of normal and abnormal stem cell lines to erythropoietin. *J Clin Invest* 61:1044-1047, 1978.

NOW a group major medical plan for doctors

Officially Endorsed by The Medical Society of New Jersey

BROAD COVERAGE
COMPETITIVE RATES
OPEN ENROLLMENT JUNE AND DECEMBER

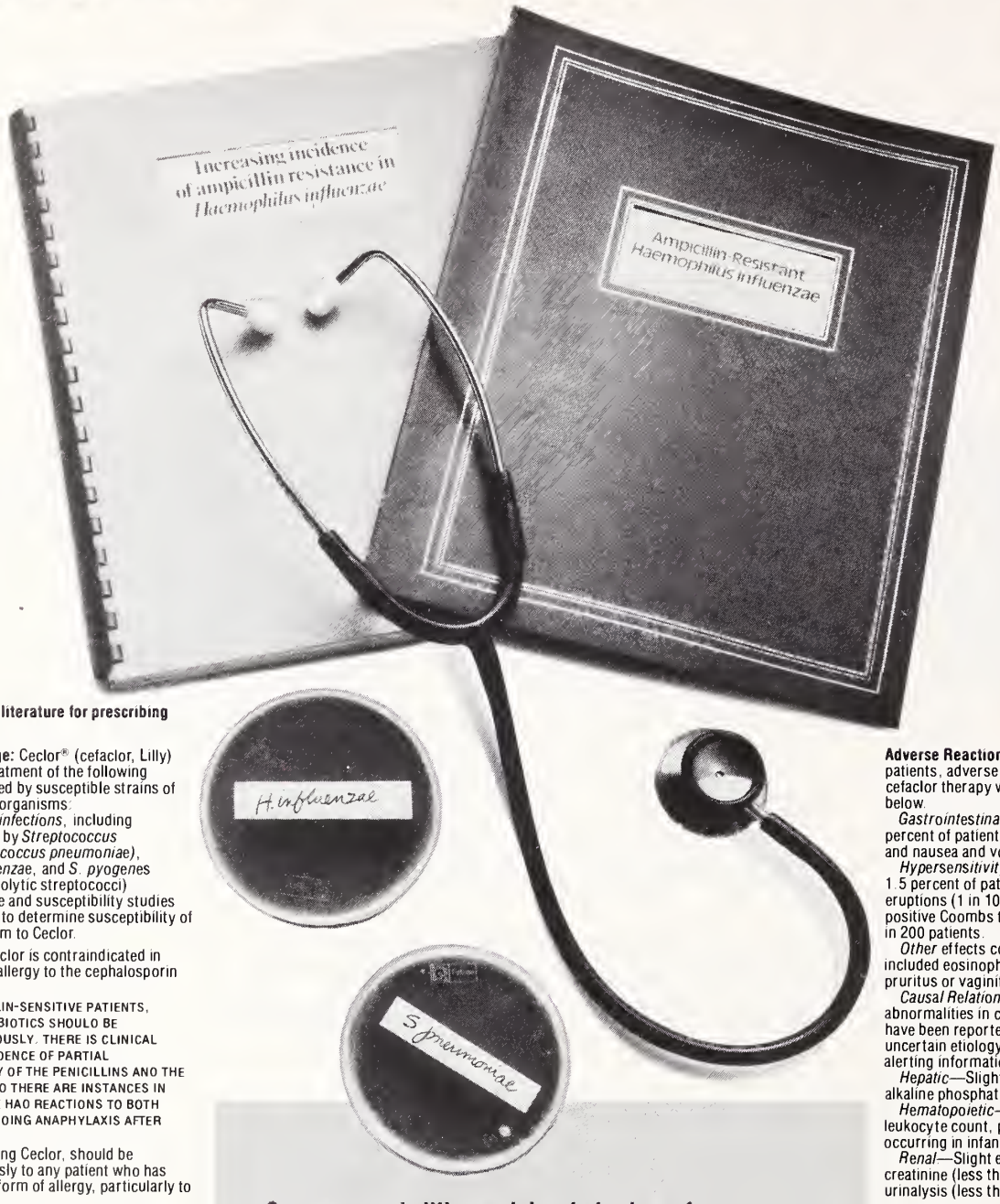
For More Information Contact

Donald F. Smith and Associates

Research Park, 1101 State Road • Princeton, New Jersey 08540 • (609) 924-8700 or (201) 622-6046

Underwritten by New Jersey Blue Cross-Blue Shield

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS TO BOTH DRUG CLASSES (INCLUDING ANAPHYLAXIS AFTER PARENTERAL USE).

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: In clinical studies in 1493 patients, adverse effects considered related to cefaclor therapy were uncommon and are listed below.

Gastrointestinal symptoms occurred in about 2 percent of patients and included diarrhea (1 in 70) and nausea and vomiting (1 in 90).

Hypersensitivity reactions were reported in about 1.5 percent of patients and included morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occurred in less than 1 in 200 patients.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory tests results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[070379R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor® (cefaclor) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., *8*:91, 1975.
2. Antimicrob. Agents Chemother., *11*:470, 1977.
3. Antimicrob. Agents Chemother., *13*:584, 1978.
4. Antimicrob. Agents Chemother., *12*:490, 1977.
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II: 880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

000482

Metastatic Cancer in the Breast

MAHMOUD MOUSAVI, M.D., Belleville

A case report of breast metastasis originating from clear cell carcinoma of the kidney, fourteen years after the diagnosis of primary tumor and nephrectomy is presented. Metastatic tumors in the breast are unusual. The most common sources are melanoma, lympho/leukemia and lung cancer. The literature has been reviewed.

Carcinoma of the breast is the leading cancer in females. It is estimated that in 1979 about 106,000 males and females developed breast cancer, and about 34,500 will die from this malignancy.[1] Even though the breast is the most common site of primary cancer, metastatic cancer to the breast is peculiar in its rarity.

Malignant melanoma followed by lung carcinoma are the most common malignancies metastasizing to the breast. A case of hypernephroma with metastasis to the breast is presented, and the literature reviewed.

CASE REPORT

The patient, a female, had a right nephrectomy for hypernephroma at age 51, in 1965. She remained asymptomatic until age 65 when she experienced pain in the left hip and weakness of the left leg. Physical examination was essentially unremarkable. The x-ray of the hip showed the presence of lytic lesions in the left acetabulum and trochanter. Pertinent laboratory data included a serum Ca^{++} of 11.6 mg/dl and prominent right hilar nodes on the chest x-ray.

The patient refused bronchoscopy or other surgical approach for confirmation of metastatic carcinoma. She was treated with radiotherapy to the hip for palliation. Three months later, the patient was readmitted to the hospital. A 2x1 cm mass was now detected in the upper outer quadrant of the left breast. Bilateral mammography showed two masses in the left breast and one mass in the right breast. The biopsy of the left breast mass (Figure 1) revealed metastatic adenocarcinoma, clear cell type, consistent with a primary lesion in the kidney.

REVIEW OF THE LITERATURE

The first case of metastatic carcinoma to the breast was reported by Friedreich in 1866,[4] from the liver. Sporadic case reports appeared in the literature until 1952, when Charache reported ten cases from the Brooklyn Cancer Institute.[5] Sandison in 1959 reported nine cases including acute leukemia and two cases of malignant lymphoma.[3] He also reported his autopsy series of 218 females and found 30 cases of metastasis to the breast (21 metastasis from the opposite breast), three of leukemia, three of lymphoma, two of lung cancer and one of pancreatic carcinoma. He also found ten cases of metastatic cancer to the breast in 139 autopsies in males: five of leukemia, three of lymphoma, one of malignant melanoma and one of lung carcinoma. In this autopsy series of women with primary breast carcinoma 30 percent had deposits in the contralateral breast.

Deeley, in 1965, reviewed the literature and added eight of his own cases.[6] Hajdu and Urban, in 1972, reported the largest series, 51 cases, from Memorial Hospital in New York: 16 were malignant lymphoma and 14 were malignant melanoma.[2] They excluded patients with leukemia and pa-

*From Clara Maass Memorial Hospital, Belleville, New Jersey. Dr. Mousavi may be addressed at 5 Franklin Avenue, Belleville, N.J. 07109.

tients younger than 20 years of age.

Toombs and Kalisher reported 21 cases from Massachusetts General Hospital with primary tumor sites as follows: 11 melanomas, four bronchogenic carcinomas, two lymphomas, and one each of adenocarcinoma of the stomach, squamous cell carcinoma of the tongue, squamous cell carcinoma of the floor of the mouth, and fibrosarcoma of nasal septum.[7]

Excluding cases of leukemia, lymphoma and metastases from the opposite breast, a total of 108 cases of metastatic carcinoma to the breast has been reported in the literature as of this report (Table 1). The most common primary is malignant melanoma of the skin (38 cases) followed by lung carcinoma (19 cases, ten of which were oat cell carcinoma), adenocarcinoma of the ovaries (seven cases), carcinoma of the stomach (eight cases) and renal carcinoma (six cases). Of the 108 reported cases in the literature, 92 were female and 16 male. (This includes 16 cases of malignant lymphoma in the Memorial Hospital series, and the present case.) In 108 cases of solid tumors, 36 were in the right breast and 32 in the left breast. Sixteen cases were bilateral, and in 24 cases the side of the involved breast was not recorded.

DISCUSSION

Metastatic cancer to the breast, unlike primary breast carcinoma, is a very uncommon condition. Usually it occurs in advanced stages of disease, but it also has been the first manifestation of malignancy. In the Memorial Hospital series six of 51 patients presented as breast tumors, and only after biopsy was it found that these were metastatic from lung carcinoma: five oat cell, and one bronchial carcinoma.[2] There has been no clear predisposing factor in development of breast metastasis in female. Some male patients have been

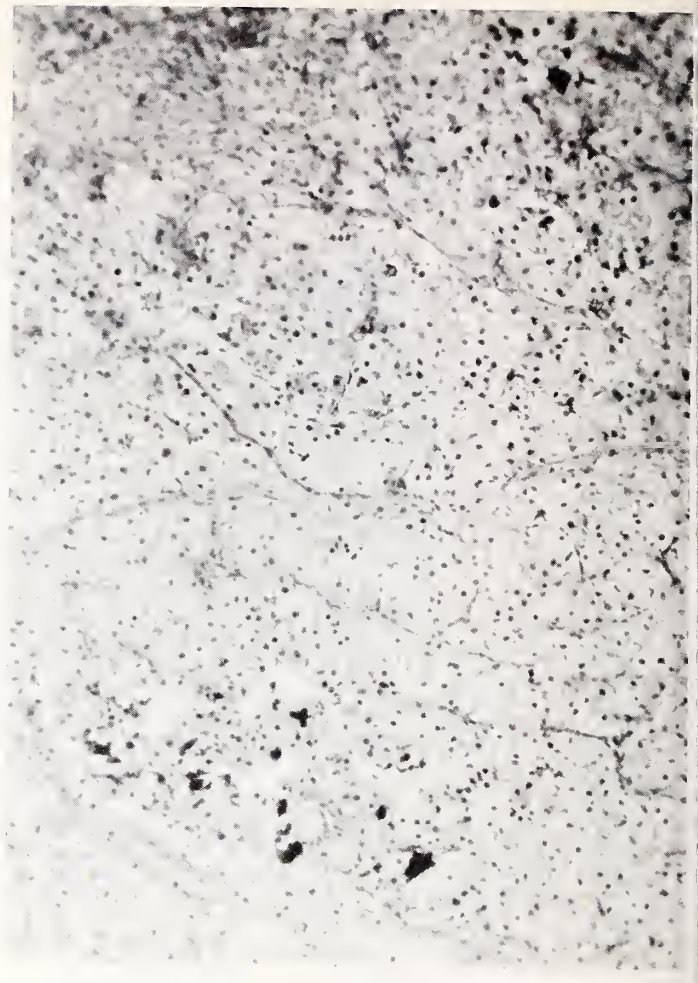


Figure 1—Biopsy of breast mass.

Table 1
Metastatic Carcinoma of the Breast

Organ	Number of Patients	Pathology	No.	Rt.	Lft.	Both	Not Recorded
Skin	39	Malignant melanoma	38	11	9	4	14
		Squamous	1		1		
Lung	19	Adenocarcinoma	6	1	1		4
		Anaplastic	3	2		1	
		Oat Cell	10	3	4	2	1
Stomach	8	Scirrhous	2	1		1	
		Adenocarcinoma	6		3	2	1
Ovary	7	Adenocarcinoma	7	4	3		
Kidney	6	Adenocarcinoma	6	2	3	1	
Sarcoma	5	Myosarcoma	4	3	1		
		Leiomyosarcoma	1				1
Cervix	4	Squamous	4	1	3		
Prostate	3	Carcinoma	3	1		2	
Thyroid	2	Poorly differentiated	2	1		1	
Uterus	2	Carcinoma	2	1	1		
Nervous system	2	Neurofibrosarcoma	1		1		
		Meningioma	1	1			
Bladder	1	Carcinoma	1	1			
Bone	1	Fibrosarcoma	1		1		
Eye	1	Melanoma	1			1	
Ileum	1	Carcinoid	1	1			
Liver	1	Alveolar	1			1	
Maxilla	1	Squamous carcinoma	1	1			
Parotid	1	Spindle cell carcinoma	1	1			
Sweat gland	1	Carcinoma	1		1		
Tongue	1	Squamous cell carcinoma	1				1
Floor of mouth	1	Squamous cell carcinoma	1				1
Nasal septum	1	Fibrosarcoma	1				1
Totals	108		108	36	32	16	24

on estrogen for adenocarcinoma of prostate when they developed breast metastasis.

Virchow in 1863 commented that "almost all organs with a high tendency to develop primary malignancy are rarely the site of metastatic tumors." [8] This statement may not be true for the lung, which has a high incidence of both primary and metastatic tumors. However, his comment does appear true for the breast. Paget asked in 1889, "What is it that decides what organs shall suffer in a case of disseminated cancer?" [9] His question still remains largely unanswered.

REFERENCES

1. Silverberg E: Cancer statistic, 1979. *Ca* 29:6-21, Jan./Feb. 1979.
2. Hajdu ST, Urban JA: Cancer metastatic to the breast. *Ca* 29:1691-1696, June 1972.
3. Sandison AT: Metastatic tumor in the breast. *Br J Surg* 47:54-58, 1959.
4. Friedreich N: Beitrage Zur Pathologie des Krebses. *Arch Path Anat* 36:465, 1866.
5. Charache H: Metastatic tumor in the breast. *Surg* 33:385-390, March 1953.
6. Deeley TJ: Secondary deposit in the breast. *Br J Cancer* 19:738-743, 1965.
7. Toombs BD, Kalisher L: Metastatic disease to the breast: Clinical pathologic and radiographic features. *Am J Roentgenol 129:673-676, 1977.*
8. Virchow R: *Die Krankhaften Geschwuelste,* vol. I. Berlin, A. Hirschwald, 1868, p. 69.
9. Paget S: Distribution of secondary growths in cancer of the breast. *Lancet* 1:571-573, 1889.
10. Benson WR: Carcinoma of the prostate with metastases to breast and testes. *Ca* 10:1235-44, Nov./Dec. 1957.
11. Ibach J: Carcinoma of the ovary metastatic to breast. *Arch Surg* 88:410-414, 1964.
12. Chopra JS and Chandra K: Bilateral breast metastasis from malignant melanoma of the eye. *Aust NZ J Surg* 42:183-185, 1972.
13. Scott J *et al:* Bilateral breast metastasis from carcinoma of the prostate. *Br Urol* 46:204-214, 1974.
14. Lowden R, Tyalor H: Angioblastic meningioma with metastasis to the breast. *Arch Path* 98:373-375, 1974.
15. Haagengensen CD: *Diseases of the breast,* 2nd edition. London, Saunders, 1971.
16. Jochimsen PR, Brown, RC: Metastatic melanoma in breast. *JAMA* 236:2779-2780, 1976.
17. Wheelock MC, *et al:* Bizzare metastasis from malignant neoplasms. *Am J Clin Pathol* 37:475-90, 1962.
18. Giarelli L, Ferlito A: Bilateral breast metastases from oat cell carcinoma of the lung. In: A man treated with DES for cancer of prostate. *J Am Geriatr Soc* 24:511-515, 1976.

Practice what we teach

Today there are over 31 million men, women and children suffering from the many forms of arthritis and related rheumatic diseases. And there just aren't enough trained rheumatologists to help them.

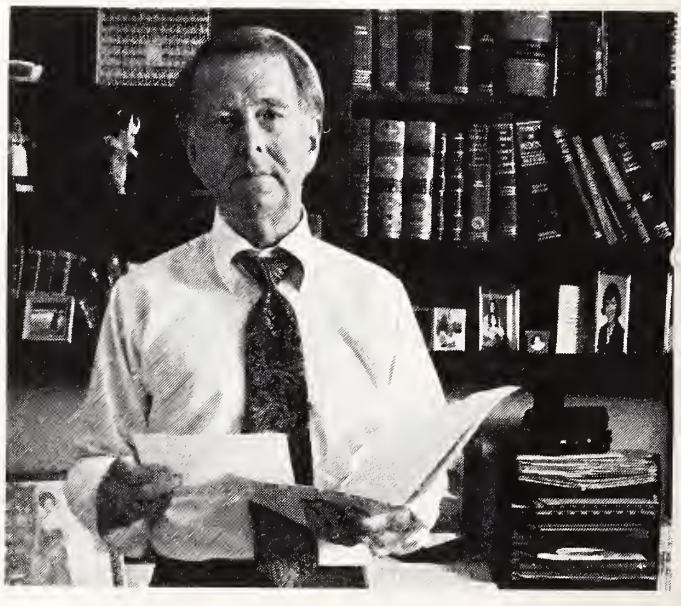
That's why arthritis sufferers need your help.

They must depend heavily on the family practitioner for better diagnosis, more effective patient treatment.

Contact your local Arthritis Foundation chapter for the latest information on arthritis. This includes continuing educational seminars by leading rheumatologists, scientific meetings, "outreach" programs—as well as the "Bulletin on the Rheumatic Diseases," "Arthritis and Rheumatism Journal," "Primer on the Rheumatic Diseases," audio cassettes and other professional materials. Free disease handbooks and medication pamphlets are also available to patients.

Please. Let us help your practice with what we teach.

The Arthritis Foundation helps doctors help.



ARTHRITIS FOUNDATION

A public service of this magazine

REVIEW ARTICLE

Anencephaly: An Overview

JOHN BONAMO, M.D., CATERINA A. GREGORI, M.D.,
JAMES L. BREEN, M.D., Livingston

Anencephaly, a fatal congenital malformation, is a condition of elusive etiology. This paper outlines etiologic investigation, but stresses the new surge for prenatal diagnosis and screening for the anencephalic infant. A perspective on this anomaly as well as obstetrical considerations, when the diagnosis is made, also are reviewed.

Anencephaly, a well-known universally fatal obstetric entity characterized by complete or partial absence of the brain and overlying skull, varies in incidence from 0.12 to 0.67 percent of newborns.[1] Most infants are born alive to die early in the neonatal period. At the time of delivery 70 to 90 percent of these cases are undiagnosed if one has used only the routine antepartum screening procedures.[12] The majority (70 percent) of the fetuses are female but recent literature from Great Britain as well as the Magee Women's Hospital in Pennsylvania state that there is an increasing number of male anencephalics being conceived.[13]

PERSPECTIVE

The etiology of anencephaly is, at best, uncertain. Due to this fact, the overwhelming majority of the current literature on the topic is directed at control of incidence by more vigilant screening of the pregnant woman. In attempting to ascertain an etiologic basis, epidemiologists merely have provided more evidence to support the view that the cause is multifactorial. In Great Britain, the Office of Population, Census and Surveys has found a seasonal variation in conception of anencephalic fetuses with peak concentration occurring February through April. Relationship to maternal age was found to be statistically significant; however, regional variation made this an ambiguous discovery. It was noted that in Wales, younger mothers were significantly more affected while in England the occurrence was greater in older women. There is an increased risk in the city dweller as opposed to those in rural areas and also a higher percentage of cases in lower socioeconomic groups.[4]

The familial occurrence as well as occurrence in twins led Rogers and Morris to believe that these deformities probably result from environmental influences acting on a genetically susceptible subsection of the population.[2] The recurrence rate quoted by Yen and MacMahon is four and a half percent and they feel this high percentage is a strong argument against a single gene hypothesis and further support for a multifactorial etiology.[5] The probability rises to ten percent after delivery of two such affected infants and Horne reported four consecutive anencephalic infants delivered of the same woman.[6,7] The incidence in diabetics is five times that of the general population. It is evident that these high-risk groups must be screened as vigorously as possible for detection of anencephaly or other neural tube defects.

Lawrence and Roberts from the Welsh National School of Medicine have surveyed "miscarriage" in relation to anencephalic births.[8] In 151 women producing anencephalic infants there was a 26 percent rate of miscarriage before the affected delivery and a 14 percent rate after. There was no

*Dr. Bonamo is a Resident, Dr. Gregori is Assistant Director and Dr. Breen is Director, Department of Obstetrics and Gynecology, Saint Barnabas Medical Center, Livingston, New Jersey 07039. Correspondence may be addressed to Dr. Breen at the Medical Center.

difference in the control population. These investigators were testing the hypothesis of Clarke *et al.* who postulate that anencephaly and spina bifida might arise from an interaction between a fetus and residual trophoblastic material from a previous pregnancy.[9] Although Lawrence and Roberts corroborate the percentage difference found by Clarke they feel there is a logical explanation for it. Since the frequency of neural tube defects is much higher in early pregnancy than at birth and the recurrence rate significant, it must be assumed that a number of miscarriages described are the result of early mortality of affected embryos.[8,9] One could also postulate women who had borne an affected infant would practice rigorous birth control and thus decrease the chance of pregnancy and, therefore, of miscarriage.

Historically, a perspective on the etiology of anencephaly would be incomplete without mention of potato blight and potato consumption. These factors were once thought to be of etiologic importance but more recent studies have shown them to be inconsequential. It is still the advice of certain epidemiologists always to choose an Idaho over a Maine potato and when in Dublin or Belfast to order rice.[10]

SCREENING AND DIAGNOSIS

1. Alpha Fetoprotein (AFP)—Alpha fetoprotein is a major plasma protein in the early human fetus. It is present in high concentrations in the amniotic fluid at 12 to 16 weeks gestation and falls to barely discernible levels in the normal term pregnancy. If a fetus is affected by an open neural tube defect the alpha fetoprotein is appreciably elevated in amniotic fluid. Several problems exist in the use of amniotic fluid AFP for screening as well as for diagnostic purposes. It is unrealistic to perform amniocentesis on all women to screen for such a low chance phenomenon as anencephaly. Knowledge of pregnancy dating must be very accurate due to AFP variation with gestational age and small neural tube defects may not even affect the levels. Diagnosis at this stage of pregnancy is further complicated by elevation of AFP in severe fatal hemolytic disease, esophageal atresia, congenital nephrosis, omphalocele, intrauterine death or fetal bleeding into the amniotic fluid.

Search for a more reasonable and reliable screening method led to the development of a radioimmunoassay for maternal serum AFP. The specificity of this test is impressive in detecting 80 to 90 percent of neural tube defects, but the test should be used as a screening device only.[11] Project directors for mass screening recommend the first step after finding an elevated serum AFP, is repeat sampling. Ultrasonography is suggested following two elevated serum AFP's. Amniotic fluid AFP levels should be obtained if ultrasonography has ruled out multiple gestation and incorrect gestational age as causes for the serum elevations. In the face of elevated serum and amniotic fluid AFP's and normal ultrasound scan, amniography could be performed for definitive diagnosis of spina bifida before interruption of pregnancy.

The radioimmunoassay for serum AFP is most specific when performed between the 16th and 18th week of gestation. Clarke *et al.* studied maternal plasma AFP in 5,539 unselected pregnant women.[9] Blood was drawn for testing on all patients registering in maternity clinics at three different centers in London. Of these patients, 1,423 women were between 16 and 22 weeks during registration and they were used as the study population. From this group, 300 were found to have elevated AFP levels. The pregnancy outcomes

Table
Maternal plasma AFP at or above 95th percentile before 23 weeks of pregnancy

Abnormal fetus:	Neural tube defect	12
	Exomphalos	1
	Gastroschisis	1
	Down's syndrome	2
	Umbilical hernia	1
	Talipes	1
Twins		17
Subsequent spontaneous abortion		20
Retrospective gestational age greater than menstrual age		45
No cause found		175
Subsequent termination of pregnancy on social grounds		1
Perinatal death		3
Outcome of pregnancy unknown;	Moved away	15
	Not traced	6
Total		300

of the group are listed in the accompanying table. Elevations were considered values at or above the 95th percentile.

To evaluate the need for generalized AFP testing in this country a collaborative study involving Case Western Reserve University, the New York Hospital Cornell Medical Center, University of California at Los Angeles and the University of Louisville has been conducted. The data on the survey have as yet not been reported but it appears that the cost-benefit ratio will favor such mass screening.[11]

2. Estriol—Estriol determination in both serum and urine during pregnancy, classically used to evaluate the integrity of the placenta, is greatly influenced by the availability of the precursors of placental estrogens. Restriction of the supply of precursor of estriol, as in anencephaly, will result in the decreased production of placental estriol independent of placental function.

Development of the fetal adrenal, which plays a significant role in the elaboration of placental estrogen, begins early and is postulated to be under trophic influence until about 20 weeks of gestation. At this time the fetal pituitary becomes vascularized and assumes adrenal control. It is at this time that the adrenal gland of the anencephalic decreases elaboration of growth and estrogen precursors, thus estriol levels plateau.[12] The adrenal gland of the anencephalic weighs approximately one gram as compared to five grams in the normal term infant. The normal fetal adrenal experiences an explosive growth rate during the last 5 to 6 weeks of gestation and is reflected in the maternal estriol level. This growth period is conspicuously absent in the estriol levels of women carrying anencephalic fetuses

3. Radiology—Conventional pelvimetry or abdominal flat plate, though not used as screening procedures, is often the determining piece of evidence in making a diagnosis of anencephaly. When an abdominal flat plate radiograph is obtained to confirm a diagnosis of breech presentation, the fetal head in the fundus should always be pictured to rule out anencephaly and perhaps avoid cesarean section for a nonviable child.

Ultrasonography is an essential tool in evaluating early diagnosis of anencephaly. The principal ultrasonic finding is absence of any normal cephalic outline on multiple scans of all positions of the uterus. The fetal head should be visible by 14 to 15 weeks gestation. Ultrasonography is also helpful in identifying those patients who may have increased AFP for reasons other than anencephaly. Ultrasound scanning is often used to confirm the inadvertent discovery of the

"Prevention of anencephaly, which should be the primary aim, is unlikely as long as the etiology remains unknown."

condition made on x-ray examination.

OBSTETRICAL CONSIDERATIONS

1. Polyhydramnios—Polyhydramnios, greater than two liters of amniotic fluid at term, is said to occur in from 30 to 50 percent of pregnancies complicated by anencephaly.[1,13] The amniotic sac usually contains approximately one liter of fluid at 36 weeks which decreases to about 200 ml. at term. In cases of anencephalics and spina bifida, increased transudation of fluid from the exposed meninges into the amniotic cavity may be an etiologic factor. Polyhydramnios present in problems of esophageal development and glutition is caused by a different mechanism than when it occurs with anencephaly. Another explanation might be excessive urinary excretion due to stimulation of cerebrospinal centers or lack of anti-diuretic hormone.[14] Polyhydramnios remains the most common clinical presentation of anencephaly.[14,15] As polyhydramnios does not occur until after 28 weeks of gestation, most cases are not detected until the last trimester.

2. Post-Datism—Post-datism is the second most common presentation of the anencephalic fetus. In 1954, Higgins reported a gestation of one year 24 days with documentation of fetal movement present until time of delivery.[16] The mechanism of the prolonged gestation in anencaphaly is unknown.

Once the diagnosis of anencephaly has been made and explained to the family, the psychologic pressures on both patient and physician often lead to attempts to initiate labor. The uterus is often refractory to oxytocin stimulation. Slow transabdominal aspiration of two to three liters of fluid in cases of polyhydramnios often facilitates induction. Although difficult, oxytocin stimulation, usually repeatedly, accomplishes delivery.

3. Shoulder Dystocia—The anencephalic infant characteristically has large shoulders and long upper extremities. This is felt to be due to the shunting of blood to these areas which normally would go to the developing brain and skull. Shoulder dystocia usually results from the slipping of a small head through a partially dilated cervix while the overdeveloped shoulders are unable to pass through. Applications of a vacuum extractor to the infant's face and careful traction has been suggested as one way to overcome this problem.[17] Even with the known increased risk of shoulder dystocia the incidence of cesarean section for a known anencephalic infant is lower than the rate for unaffected infants[1]. Most obstetricians are reluctant to subject a mother to suprapubic delivery for an inevitably pessimistic result.

4. Miscellaneous—Retained placenta, postpartum hemorrhage, urinary tract infection and association of diabetes mellitus were found significantly more frequently in patients with anencephalic infants.

CONCLUSIONS

Prevention of anencephaly, which should be the primary aim, is unlikely as long as the etiology remains unknown. New diagnostic procedures on the horizon include measurement of fibrinogen and fibrin split products in amniotic fluid, estimation of beta trace protein (a cerebrospinal fluid protein) in amniotic fluid and the measuring of macrophage content of amniotic fluid cells.[18-20]

Measurement of maternal sera for alpha fetoprotein seems, at this juncture, to be the procedure of choice if mass screening for neural tube defects is to occur. If this does come to be routine, those at the helm of pilot programs stress the need for standardization in processing of specimens to assure maximum benefit in interpretation of results.

Neural tube defects, a common major birth defect second only to congenital heart malformations, occur independently of our medical activities. We have, as yet, been unable to form conclusions about etiology but we hope that more epidemiologic analysis will begin to shed light on the problem. At present our knowledge of anencephaly merely serves to put our scientific conceit into perspective.

REFERENCES

1. Dilip K, Guha Ray: Obstetric problems in association with anencephaly. *Obstet Gynecol* 46:569-572, 1975.
2. Rogers S, Morris M: Infant mortality from spina bifida, congenital hydrocephalus, monstrosity and congenital diseases of cardiovascular system *Ann Human Genet* 34:295-305, 1971.
3. Smith M, Ratcliffe J: Screening for neural tube defects. *Lancet* 2:373-374, 1978.
4. Crowne K: Epidemiology of anencephalus, spina bifida and congenital hydrocephalus. *Br Med J* 2:1156, 1976.
5. Yen S, Marmahon B: Genetics of anencephaly and spina bifida. *Lancet* 2:623, 1968.
6. Santos-Ramos R, Ovenhoecter J: Diagnosis of congenital fetal abnormalities by sonography. *Obstet Gynecol* 45:279-283, 1975.
7. Horne HW: Anencephaly in four consecutive pregnancies. *Fertil Steril* 9:67-69, 1958.
8. Lawrence KM, Roberts CJ: Spina bifida and anencephaly: Are miscarriages a possible cause? *Br Med J* 2:361-362, 1977.
9. Clarke P, Gordon Y, Kitau M, Charo T, Lechworth A: Screening for fetal neural tube defects by maternal alpha fetoprotein determination. *Br J Obstet Gynecol* 84:568-573, 1977.
10. Watt M: Anencephaly, spina bifida and potato blight. *Lancet* 1:269-270, 1973.
11. Machol L: Detecting NTDs: Proliferating U.S. programs. *Contemp Obstet Gynecol* 12:51-59, 1978.
12. Dean L, Abell D, Beischer N: Incidence of anencephaly and other malformations when oestriol excretion is very low. *Br Med J* 1:257-258, 1977.
13. Webb T: Alpha fetoprotein values in late second trimester pregnancy. *Lancet* 2:578, 1978.
14. Pritchard J, MacDonald P: *Williams Obstetrics*. New York, Appleton-Century-Crofts, 1976, pp 830-831.
15. Cunningham M, Walls W: Ultrasound in evaluation of anencephalus. *Radiol* 118:165-167, 1976.
16. Higgins L: Prolonged pregnancy. *Lancet* 2:1154, 1954.
17. Erez S, King TM: Anencephaly: A survey of 44 cases. *Obstet Gynecol* 27:601-604, 1966.
18. Macri JN: Beta trace protein and neural tube defects. *Lancet* 1:1109-1110, 1974.
19. Pordie DW: Raised amniotic fluid AFP in fetal neural tube anomalies. *Lancet* 1:1013, 1975.
20. Macri JN: Prenatal diagnosis of neural tube defects. *JAMA* 236:1251-1254, 1976.

SPECIAL ARTICLE

No Heroics—A Jewish Perspective on Artificial Feeding of the Dying*

MICHAEL A. NEVINS, M.D., Woodcliff Lake**

In a nursing home, an elderly patient with terminal cancer lies in a stupor close to death. No longer able to swallow food unless artificial feeding is begun, death within a few days is assured. Is the physician morally obliged to begin feeding by intravenous or nasogastric tube?

This story may lack the dramatic impact of a Karen Quinlan case, yet it illustrates a medical-ethical dilemma encountered frequently by many physicians. Before exploring the issues involved from a Jewish perspective, it is necessary first to review certain contemporary secular phenomena. Medical humanism has become a fashionable subject guaranteed to elicit stimulating cocktail party conversation and even to provide good theater—witness the success of a current Broadway play "Whose Life Is It Anyway?" Medical ethics' "think tanks" proliferate and Elizabeth Kubler-Ross has become the prophetess of a burgeoning literature on "Death With Dignity" which almost has become a cultural cliché.

A beleaguered medical profession has been accused of paternalism and taking the easy way out by turning to technology when faced with difficult decisions rather than wrestling with intangible ethical matters. It quite correctly has been suggested that physicians are not endowed with unique moral insight by virtue of their medical training. The technologic explosion has provided the tools (e.g., amniocentesis, defibrillators, pacemakers, respirators, dialysis machines and transplantation) that have created a multitude of new situations the like of which were unimaginable a generation ago. In addition to this Pandora's box of medical instrumentation, the legal system has intruded with an expanding number of rulings so that increasingly the physician is frustrated in comprehending the medical-legal limits of his role. Prognosis committees, informed consent, "brain death," "Living Wills" and "Right To Life" legislation are among the many related issues currently being debated both within and without the health care community.

Unfortunately, when the individual physician seeks guidelines applicable to his daily practice, he usually is confronted with generalizations or confounded by ethicists who excel at posing questions that lack answers. Some medical traditionalists have counseled maintenance of physician autonomy at all costs. Yet, it is clear that society insists on playing a greater role in sharing responsibility in making certain life-or-death decisions. Thus, there are compelling reasons for the profession to rethink collectively and to reformulate its attitudes.

In the face of such confusion over morality in medical decision making, it is natural to seek guidance from religious authorities. In 1957 Pope Pius XII, addressing an International Congress of Anesthesiologists, stated that "extraordinary" efforts were *not* mandatory to keep alive the unconscious, terminally ill. He observed that "normally, one is held to use only ordinary means—according to circum-

*Reprinted from the *Bergen Pines Medical Staff Report* (No. 2, 1980), Bergen Pines County Hospital, Paramus, NJ 07652.

**Dr. Nevins is an internist and cardiologist who is codirector of medical education at the Pascack Valley Hospital, Westwood and Bergen Pines County Hospital, Paramus; he also is clinical associate professor of medicine at New Jersey Medical School, CMDNJ, Newark. He may be addressed at the Bergen Pines Hospital.

stances, places, times and cultures." "Ordinary" implies doing what is normal, regular or appropriate under the circumstances, but consider the options in the case under discussion depending on whether the patient was being cared for respectively in a hospital, nursing home or family residence. Does morality differ according to the locus of treatment? Surely, what is ordinarily available in a hospital would be extraordinary in the home setting.

JEWISH ATTITUDES ABOUT DEATH AND RELIGIOUS LAW

In Jewish tradition, death is considered as an inevitable transitional state when the soul leaves the body and ascends from this world to that beyond. Many commentaries and regulations concerning death appear in Jewish literature, and indeed, 903 forms of death of various significance have been cited. (For example, "the kiss of death," reserved for the most righteous, is described as being gentle as drawing a hair out of milk.)

Although man's freedom of choice is fundamental to Judaism, what constitutes good acts and latitude in interpretation according to circumstances depends on which of the three major streams of Judaism is being considered. Therefore, no single Jewish view can be defined and even within the three major branches considerable diversity of opinion exists both present and past. Predictably, the interpretations of contemporary theologians reflect their fundamental Jewish philosophy concerning Halakah (Jewish law) and whether "rules are rules" or should be adapted to present needs.

For the Orthodox, Halakah is the expression of the revealed will of God and, as such, is relatively impervious to changed historical circumstance. In Reform Judaism, Halakah is a non-binding option that provides historical insight, but is more a guide than an authoritative unequivocal statement. The Conservative position, intermediate between these poles, is more complex. The following conservative commentaries on Jewish law are instructive:

"The exigencies of time, place and community require their own adjustment. We must not ignore the past, nor may we make the past so rigid that we become unbending and unyielding."—(S. Schechter)

"The ethical values of our tradition should have the power to judge the particulars of Jewish law. If any law in our tradition does not fulfill our ethical values, then the law should be abolished or revised."—(S. Siegel)

Thus, conservative Judaism accents Halakah as an imperative rather than an option, but believes that it is derived from and for the Jewish people and can be changed according to the peculiar needs of the times. With these remarks concerning the spectrum of Jewish attitudes about law, let us explore how traditional and contemporary scholars have approached the fundamental bio-ethical problems depicted in the example cited at the beginning of this article, namely whether it is permissible to refrain from introducing artificial feeding in a moribund patient who has stopped eating, but surely will die if not artificially fed.

TRADITIONAL JEWISH IDEAS ABOUT EUTHANASIA

The word euthanasia is derived from two Greek roots "eu" meaning pleasant or well, and "thanatos" meaning death. Any consideration of this subject must recognize that there are distinctions between different kinds of euthanasia. One author suggests three forms: active, active-passive and passive-passive. Active clearly is intentionally killing or euthanasia by commission. Active-passive is the removal of life support (e.g., the Karen Quinlan case). Finally, passive-passive is refusal to initiate a new therapy or euthanasia by omission.

Judaism steadfastly opposes active euthanasia and is committed absolutely to preservation of life even when accompanied by suffering. According to this view, some Orthodox rabbis have concluded that since life is of infinite worth, any fraction, even at the brink of death, is of equal value. Only God bestows life and decides when it should be taken away and man being a tenant in his body does not possess absolute title. So long as there is a spark of life, man dare not presume to hasten death, no matter how hopeless it may appear. Thus, the physician's God-given duty to heal includes the duty to keep the patient from dying so that withdrawal of either food or water is forbidden. Maimonides noted that God created food and water, and that we are obliged to use them in warding off illness and disease. Rabbi Jacobovitz of England cites an earlier prohibition of withdrawal of food from an incurable to expedite his death, even if the absence of food would relieve his agony, since the doctor's opinion that the disease is fatal is less certain than that the patient would die if food were withdrawn. In this respect, withholding food, a natural means of sustenance is considered as an active form of euthanasia.

Concerning artificial means of delaying death, however, the law is less clear. Jacobovitz states that a physician's duty to heal extends only when he has any hope to restore the patient to health. When there is no such hope, the doctor, though *permitted* to use artificial means to sustain life, is not commanded to do so. However, another modern Orthodox commentator, Rabbi Bleich, has observed that "God provided the material and technology which makes possible catheters, intravenous infusion and respirators; we are obliged to use them in order to prolong life" (an exception is that the physician is not required to use unproven or experimental methods).

Despite these admonitions, when the dying patient, or *goses,* has entered the final death throes and death is considered to be inevitable within a matter of only a few days, certain modifications or fine distinctions are appropriate. Thus, whereas it is forbidden to cause the dying to pass away more quickly if it entails moving or disturbing him or doing a positive act, the *removal* of anything hindering the soul's departure may be permissible. The Talmud provides several examples; closing the eyes of the *goses* might upset a delicate balance and hasten death and so was prohibited. Similarly, it was forbidden to move a dying patient lest it accelerate death. Maimonides added that one must not rub or wash a *goses* or even remove a pillow from under the head. All these are representative of active euthanasia in the traditional literature. The Talmud said "The matter may be compared to a flickering flame; as soon as one touches it, the light is extinguished."

On the other hand, if a person was dying and someone outside was chopping wood, thereby stimulating or delaying a natural process, it was permissible to cease chopping. Similarly, stimulants such as salt applied to the tongue could be gently wiped away. Removing such obstacles to death were considered permissible only when applied to persons in whom death was imminent.

An oft-quoted Talmudic story concerns the death of Rabbi Judah ha-Nasi. Since prayer was considered the therapeutic equivalent of medicine, many rabbis gathered at Rabbi

Judah's bedside to pray for his recovery. The rabbi's handmaid, known for her great wisdom, had pity on the suffering Rabbi Judah, took a large jar and threw it from the roof to the ground. The rabbis were startled and momentarily stopped their praying allowing Rabbi Judah to die peacefully. In this story prayer, too, represents a life support system and the handmaid's strategem of indirectly withdrawing "treatment" was favorably commented upon in the Talmud.

Thus, the Orthodox position is that dignity lies in the struggle to sustain life and the physician is required to use the full range of available treatment. Neither quality of life nor distinction between what is heroic or ordinary are relevant according to this view. The sole exception is in treating a *goses* in the final death throes when acts of omission may be appropriate. This cannot be applied to all who are terminally ill or include positive acts, but permits refraining from initiating such acts.

LIBERAL JUDAIC ATTITUDES

Conservative Rabbi S. Siegel rejects the orthodox view that every moment of life is precious even when sustained by artificial means. Rabbi Siegel notes that Judaism is a religion of life and that the ultimate good is not merely physical functioning. "The development of medical technology has caused problems which our ancestors have hardly foreseen. We must not forget in our loyalty to the tradition, the welfare of the suffering patient who when the giver of life has proclaimed the end of his earthly existence should be allowed to die in spite of our machines."

The remarks of several Reform rabbis also are pertinent:

"Jewish tradition . . . teaches that we are permitted to remove both impediments to death and artificial means to sustain life, and that we are not forced to pray for the recovery of someone who is in agony and who, in fact, has no chance to recovery."

"It is a moral obligation to maintain life by all ordinary means, but there is no obligation to use extraordinary means. Ordinary means are actions which do not cause grave hardship to the patient and which offer a reasonable hope of success. Ordinary or natural means of pursuing life include normal nursing care, *feeding by mouth, giving fluids by mouth,* the relief of pain, insomnia and mental anguish. Extraordinary means are means which involve great expense, inconvenience, or hardship, and which at the same time offer no reasonable expectation of success or of benefit. Extraordinary means are not likely to cure, they are unlikely to reverse the dying process, and they are repugnant to the family who see the patient as a machine kept alive merely by mechanical connections. By removing these devices are we not playing God? To the contrary, we may very well ask when a patient has entered the dying process and we artificially prolong life beyond its natural state, if we are not then playing God? Ought we not let nature take its course?"

"For the liberal Jew who does not consider himself bound by Halakah he may choose that course of action which is most humanizing . . . our decisions, freely made, must be responsible rather than expedient, self-enhancing rather than self-serving."

Rabbi Solomon Freehoff states that the physician is not duty bound to force a terminal patient to live a few more days or hours. While he may not take any overt action to hasten death such perhaps as giving an overdose of an opiate; he may refrain from doing that which will prevent his dying . . . if he ordered the removal of the intravenous apparatus, there may be some objection if this was done forcibly and was upsetting to the patient, but if the patient is a hopelessly dying patient, the physician has no duty to keep him alive a little longer. He is entitled to die. If the physician attempts to actively hasten the death, that is against the ethics of Jewish law. However, if the intravenous fluid is allowed to run out without being refilled, no sin would be committed. This merely is preventing that which delays death. The physician simply has ceased his efforts to delay it.

ALLOWING OR CAUSING

In this study, a single clinical management problem has been considered in the context of Jewish law. The case was selected because it presents a relatively uncomplicated and frequent dilemma, but it would be a mistake to presume that the insights provided could be extrapolated from this limited scenario to other more ambiguous settings. The result might be to create a moral domino effect sanctioning first passive, then passive-active and, finally, active euthanasia. But for those who find it presumptuous for physicians to "play God" by choosing not to prolong death, is it not equally arrogant to artificially prolong the process of death?

When I have posed this same clinical problem to physicians and nurses, they generally have opted for not instituting artificial feeding in terminally ill patients in the final phase of life. To my surprise, when I asked the same question of a well-informed lawyer sophisticated in medical/legal matters, I was told that a group of her colleagues at a legal convention confronted with the same hypothetical problem had advised that artificial feeding should be started.

While contemporary society debates the appropriateness of legislating death, physicians must retain their traditional role of decision makers and patient advocates. Although decision making often may be uncomfortable because of the uncertainty involved, nonetheless decisions must be made and clinicians rarely have the luxury of lengthy deliberations or group decision sharing.

When doubt exists or there is a reasonable likelihood that the patient may improve, the traditional toast "L'Chaim"—to life!—has been suggested by an Israeli physician as a useful philosophic guideline. However, when nothing can be gained by the additional hours or days that might be achieved by artificial feeding or use of other technological supportive devices, such therapeutic activism is inappropriate.

Except in the strictest Orthodox view, then, the prevailing Jewish attitude is that at the terminus of life, there is no obligation to extend life if only to delay death. However, this applies only insofar as sanctioning acts of omission or inaction and should not be applied to overt active forms of euthanasia regardless of the patient's written or unwritten attitude.

A list of **selected reading** may be obtained from the author or from *The Journal* office.

FAREWELL ADDRESS

As We Give, We Receive

ALFRED A. ALESSI, M.D., Hackensack
President 1979-1980

Recognition from one's peers is indeed a fine honor and you have given me, as your President, generous returns for those modest contributions I have made. I am especially aware of this as I compare my contributions with those of other Presidents of this Society down through the years.

In many instances this office has been filled by persons who have given unusual and outstanding service. You must keep in mind that contributions are not made by one physician alone; many brains and many hands are needed, but oftentimes one person receives the credit. I have learned one thing in my year as your President: nothing concentrates a man's attention on the storms that blow about him like playing the part of the lightning rod.

The Annual Report contains an accounting of my stewardship, including our successes and our failures.

For years I believed that if we didn't have so many problems in medicine, we wouldn't need government people around us to help solve them. During this past year I have come to realize that if we didn't have the government people around us, we wouldn't have so many problems. It appears that the Federal Government holds the view that massive expenditures will help obscure the evidence of bad judgment.

The political climate is such that public concern over bureaucracy and inflation gives the public greater disposition to say to government, "Get off my back." All of the good intentions and all the cost-containment commissions and all the state and government regulation to control costs cannot make inflation go away. On the contrary, one reason we suffer from double-digit inflation is that the public has been led to believe that all our problems can be solved by government waving its "magic wand." That wand has proved to be expensive and useless.

On the other hand I don't think anyone of us is willing to sacrifice the higher quality of health care which has resulted from new technology and treatments in order to lower hospital costs. Abolishing costly regulatory mechanisms may be the best step to insure quality health care at a reasonable cost in New Jersey. Congress did not pass a mandatory cost-containment program. There is now more emphasis on a voluntary program.

There are no words in the English language more suspect than, "I'm from the Federal Government and I'm here to help you." The Federal Trade Commission's (FTC) entry into the health care scene has been greeted by providers with all the enthusiasm one would expect for a second coming of the bubonic plague.

There are several areas which I would urge you to consider in the course of our deliberations here. I want to congratulate the Ocean County Medical Society. Their members have agreed to pay the AMA dues for all first-year members of their Society. This is a marvelous step toward the unification of our profession and we all are watching this development with interest.

During the next few days we will be considering the possiblity of changes in the size of the House of Delegates. It may well be that a reduction in the number of Delegates will provide an improvement. I urge you to approach this idea with an open mind and to give us the benefit of your thinking.

There are those among us who feel that the needs of the specialty societies are not being addressed in this House of Delegates and that they would be served better if the specialty societies had direct representation in the House. They claim with some merit that despite the specialty society members in this House their unique problems are not being considered. I am going to pay special attention to the debate on this issue.

Another problem is the question of direct representation of medical students in this House. I believe that the survival of medicine in the future lies with the young physicians. We must take every step to encourage their involvement and it well may be that student representation is the way to go. I urge you to approach this question with an open mind.

On a larger context, I urge you to give some thought to the problem of expanding communications. It is essential that physicians learn to share ideas better with each other. We must improve conceptual intercourse between medicine, the bureaucrats, and the county, state and national legislators. And, we must give special attention to our communications with the public.

Mull over this thought: in Bergen County we have had tremendous success in having a lay person serve on our Judicial Committee. That person has proved to be a valuable right arm. Currently serving is Dr. Samuel Bieber, Vice-President of Academic Affairs of Fairleigh Dickinson University. Before him Mr. William Caldwell, the Editor of *The Record* and a Pulitzer Prize winner, served our Judicial Committee with great distinction for many years. I urge you to think about the possibility of having a lay person with a

*President's farewell address—presented before the House of Delegates, May 11, 1980, Meadowlands Hilton, Secaucus, NJ.

vote serve on your County Society Board of Trustees at the State Society and even in this House of Delegates. I think it would enhance our credibility with the public.

Remember that the public-at-large is not a faceless entity. The public is a collection of our individual patients with whom we must communicate on a one-to-one basis. Unfortunately some physicians forget that the best thing we can give our patients is a good example. Although patients are at ease with the science of medicine, they are worried about the art of medicine. Patients are concerned when they do not receive adequate explanation from the physician of their specific illness. This is a far more serious concern than the cost of medical care, for they want the physician to consider them as persons not as diseases.

Too often some physician members are oriented primarily toward their hospital staff. We must do all in our power to convince such physicians that their Medical Society is the most important professional relationship. It is, in essence, the mother church.

I have been concerned over the years because there are 9,300 members of this State Society, while there are nearly 12,000 physicians in New Jersey. When Dr. James S. Todd, Dr. Augustus L. Baker, Mr. Vincent A. Maressa, or I and other members of the State Society leadership go before Governor Brendan Byrne, Dr. Joanne Finley or Commissioner James J. Sheeran, we cannot represent the Medical Society of New Jersey membership and exclude other physicians. We represent them all, however, none of us has any desire to break our backs representing the interest of the physicians who are not members of this Society and who do not carry their share of responsibility. Every doctor in New Jersey should belong to this Society. No other group in this state has lifted a finger to protect the interest of physicians and the interest of patients the way this Society has. Every physician benefits from the activities of this Society and every physician in the state should carry his share of the load. And this is also true of the AMA. Every physician should support our only national organization.

I would like to unburden myself of a private conviction. I address this to the younger physicians and especially to the medical students. You are contemplating the medical career that lies before you; in some way it is analogous to looking through a pair of field gasses. After 42 years of service in medicine, I am figuratively looking through the other end of those field glasses and it makes me ponder. A very lovely lady once needled her son who was inclined to take things easy by reminding him that God had been good to him and had given him exceptional gifts. She refused to let him waste those gifts and said it was a sin not to give back in the same measure that which had been given to him. She refused to let him quit school.

I say to you, God has been good to you. You have exceptional talents which are given to few people. You are duty-bound to use those talents for the good of others in the same measure as you have been blessed. It will be sad if, after a career in medicine, you will some day ask yourself, "What have I given that measures up to what I have received?" If you have to say to yourself, "I have been a taker—never a giver," you will be a disillusioned person. But if you can say to yourself, "I have served my Society, I have paid my dues to my profession, I have given in the same measure that it was given to me," you will have one of life's great treasures. I urge you now, don't cheat yourself. Be generous with your time and your talents—pay your dues.

In conclusion, I have learned to be humble as President of this prestigious Medical Society. This humility comes from the knowledge that any success has come from the hard work, the guidance and the support of so many fine people. This includes my personal family—my wife Isabel and my children. It also includes my professional family—my county society, and state society, my specialty society, and the AMA, and, indeed, all of you, my good friends. I wish to express my heartfelt gratitude to a real professional, Mr. Vincent Maressa and his excellent staff.

Let me say farewell with a thought expressed by Sir William Temple:

"The greatest pleasure of life is love,
The greatest treasure, contentment,
The greatest possession, health,
The greatest medicine is a true friend."

May the Lord bless you with love, contentment, health and good friends. And now, farewell.

Idiopathic Hypertrophic Subaortic Stenosis: Echocardiographic Characteristics*

MICHAEL V. COHEN, M.D. New York**

Aortic stenosis may produce angina, congestive heart failure, syncope, and sudden death. Whether congenital or acquired, valvular aortic stenosis is the most common cause of obstruction to left ventricular outflow. However, when evaluating a patient for aortic stenosis, other less common causes of outflow obstruction should be entertained. Discrete subaortic fibrous membranes, idiopathic hypertrophic subaortic stenosis, and supravalvular stenosis each may mimic many of the symptoms and simulate the signs of valvular stenosis. Careful physical examination may be sufficient to distinguish between the entities, but non-invasive diagnostic techniques usually provide postive identification. Because of different therapeutic considerations, it is important to make the distinction between the various forms of left ventricular outflow obstruction. This report describes one patient who had one of the less common types of obstruction: idiopathic hypertrophic subaortic stenosis.

CASE REPORT

A 21-year-old male always had been active and never had complained of difficulties until two years before admission to Montefiore Hospital and Medical Center (MHMC), when he began to experience exertional retrosternal pressing pains without radiation, dyspnea, or associated lightheadedness. Because of increasing frequency of these pains he was evaluated at MHMC. Physical examination revealed a normotensive, muscular young man with a normal habitus and appearance. The carotid pulse had a bisferiens quality with a brisk upstroke. The cardiac apical impulse was not displaced but was sustained and double. S_1 and S_2 were normal, and S_3 and S_4 gallops easily were detected. A grade 3/6 systolic ejection murmur audible at the apex and along the left sternal border was heard faintly over the carotid arteries. The murmur's intensity increased during Valsalva strain.

The electrocardiogram revealed Q waves in V_1 and V_2 and tall R waves in the lateral precordial leads. The mitral valve echogram (Figure 1) demonstrated the characteristic systolic anterior motion (SAM) which is typical of idiopathic hypertrophic subaortic stenosis (IHSS). The multiple echoes within the SAM and contact between the SAM and interventricular septum were also highly suggestive of IHSS. The abnormal aortic cusp motion in this patient is demonstrated in Figure 2. The right and non-coronary cusps opened normally at the beginning of systole, but then partially closed in mid-systole as the outflow tract obstruction developed.

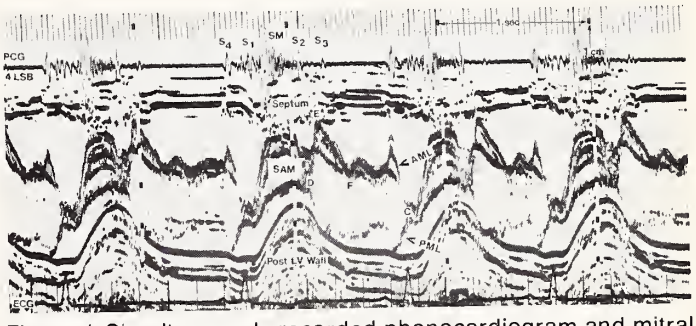


Figure 1-Simultaneously recorded phonocardiogram and mitral valve echogram from a patient with idiopathic hypertrophic subaortic stenosis (IHSS). The systolic anterior motion (SAM) of the anterior mitral leaflet (AML) is a characteristic feature of IHSS. Multiple linear echoes within the SAM and systolic contact with the interventricular septum help to distinguish a true SAM from the pseudo-SAM of hyperkinetic circulatory states. Perhaps the must important distinguishing feature of a true SAM is the more rapid velocity of its initial systolic rise than the peak velocity of posterior wall contraction. The phonocardiogram recorded in the fourth left intercostal space along the left sternal border (4 LSB) shows S_3 and S_4 gallops and a systolic murmur (SM). Abbreviations: PML = posterior mitral leaflet. Post LV Wall = posterior left ventricular wall.†

Cusp reopening was simultaneous with the appearance of the systolic murmur. Additional partial closures and reopenings created a pattern of coarse fluttering. The left ventricular chamber was small and the walls hypertrophied (Figure 3). However, the hypertrophy was not uniform. The end-

*From the Division of Cardiology and Department of Medicine, Montefiore Hospital and Medical Center and the Albert Einstein College of Medicine, Bronx, New York. This series is edited by Ira L. Rubin, M.D., who is Clinical Professor of Medicine at the latter and Attending Physician and Chief of Electrocardiographic Service at the former.

**Dr. Cohen is Associate Professor of Medicine, Albert Einstein College of Medicine, NY and Adjunct Attending Physician, Departments of Medicine and Cardiology, and Director of the Non-Invasive Laboratory, Montefiore Hospital and Medical Center, Bronx, NY. He is the recipient of a Research Career Development Award from the National Health, Lung and Blood Institute, HL-00281. Correspondence may be addressed to Dr. Cohen at Montefiore Hospital, Division of Cardiology, 111 East 210th Street, Bronx, NY 10467.

†Reproduced with permission of Futura Publishing Co., Inc. From Cohen MV: Correlative Atlas of Non-Invasive Techniques in the Diagnosis of Adult Cardiac Disorders, 1980.

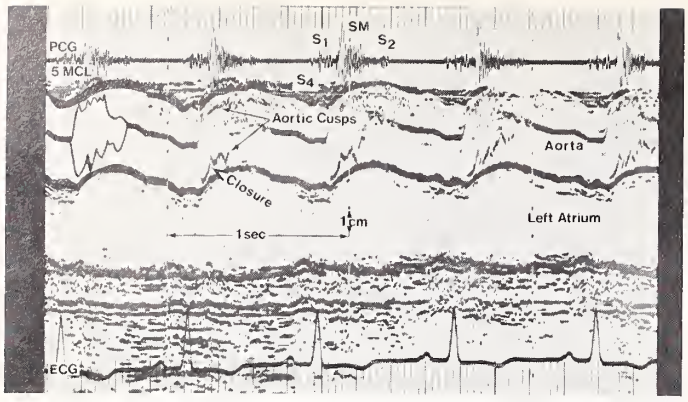


Figure 2—Simultaneously recorded phonocardiogram and aortic root echogram from the same patient presented in Fig. 1. Motion of the right and non-coronary aortic cusps is well visualized; an artist's drawing of the cusp movements appears at the extreme left. Partial premature cusp closing related to development of the subvalvular obstruction and then reopening are apparent. The loud systolic murmur (SM) is recorded only after the cusps have reopened. Abbreviations: 5 MCL = fifth left intercostal space in the mid-clavicular line.†

diastolic septal thickness was nearly 2 cm, and the ratio of end-diastolic septal to posterior wall thickness was 1.5.

At the time of cardiac catheterization a fixed 120 mmHg systolic pressure gradient across the left ventricular outflow tract was measured. There was no gradient across the aortic valve itself. The left ventricle was small and during systole was banana-shaped. A subvalvular chamber formed by systolic apposition of the anterior mitral leaflet and interventricular septum was visualized.

Treatment with high doses of propranolol failed to relieve the patient's chest pain. Accordingly part of the patient's interventricular septum was surgically resected with subsequent resolution of most of his symptoms. Despite this clinical improvement the patient died suddenly a year and a half after surgery.

DISCUSSION

Idiopathic hypertrophic subaortic stenosis is a dynamic obstruction of the left ventricular outflow tract produced by a bulging interventricular septum and the anterior leaflet of the mitral valve. The massively hypertrophied septum causes displacement of the papillary muscles. Consequently the chordae to the anterior leaflet are bowed over the bulging septum and held taut. Thus the anterior leaflet is prevented from closing during systole and is held in the outflow tract creating an obstruction. Any maneuver which increases papillary muscle contractility or allows closer apposition of the septum and anterior leaflet will increase the severity of the obstruction.

Of the various non-invasive diagnostic tests the mitral valve echogram in IHSS yields the most important and specific information. Because the anterior leaflet is held in the left ventricular outflow tract during systole, a typical abnormality of mitral valve motion is recorded (Figure 1). The anterior leaflet arches anteriorly in systole creating a systolic anterior movement or "SAM." There may be several parallel linear echoes within the "SAM" with each probably representing bulging of different portions of the leaflet. As blood rushes past the leaflet during systole a Bernoulli effect sucks parts of the leaflet further into the outflow tract

†Reproduced with permission of Futura Publishing Co., Inc. From Cohen MV: Correlative Atlas of Non-Invasive Techniques in the Diagnosis of Adult Cardiac Disorders, 1980.

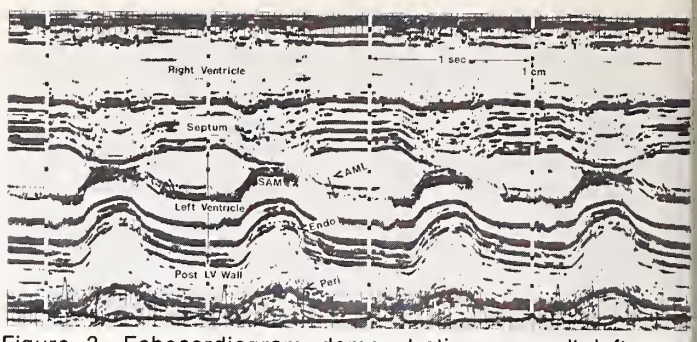


Figure 3—Echocardiogram demonstrating a small left ventricular chamber with an asymmetrically hypertrophied interventricular septum from the same patient described figures 1 and 2. Abbreviations: see figures 1 and 2. Endo = endocardium; Peri = pericardium.†

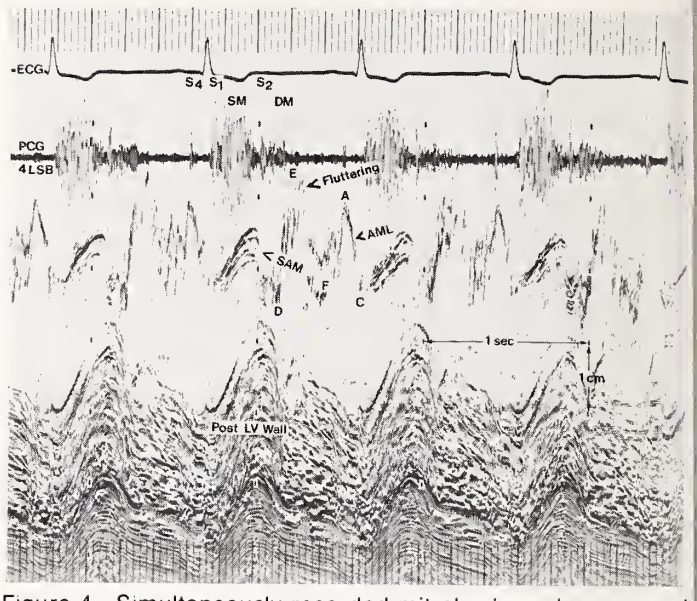


Figure 4—Simultaneously recorded mitral valve echogram and phonocardiogram from a patient with hemodynamically significant aortic insufficiency. Marked fluttering of the anterior mitral leaflet (AML) is diagnostic of aortic insufficiency. Mitral valve systolic anterior motion (SAM) also is recorded. The parallel rise of the SAM and posterior left ventricular wall (Post LV Wall) suggest this is a pseudo- and not true SAM.†

accounting for the multiple echoes. There is not a good correlation between the presence or magnitude of the left ventricular outflow tract gradient and the size of the "SAM." Some patients without a resting gradient may have a "SAM." If the mitral valve echogram is normal in a patient with IHSS, amyl nitrite, which decreases preload and hence left ventricular dimensions, may provoke a "SAM."

The mitral valve "SAM" is not specific for IHSS. A pseudo-SAM may be seen in hyperkinetic circulatory states such as aortic insufficiency (Figure 4) and in pericardial effusions. The pseudo-SAM appears because of either vigorous posterior wall contractions displacing the mitral ring anteriorly or anterior systolic swinging of the heart within a fluid-filled pericardial sac. Multiple echoes within the SAM and contact between the SAM and interventricular septum (Figure 1) are more likely to be seen in IHSS than conditions with pseudo-SAMs (Figure 4). The difference between the very rapid initial upstroke of the SAM and the distinctly less rapid posterior wall movement (Figure 1) definitely distinguishes the true SAM from the pseudo-SAM where the two slopes are nearly equal (Figure 4).

With the initial left ventricular ejection the aortic valve opens normally. But as the dynamic obstruction develops, aortic flow decreases and the aortic cusps begin to float closed (Figure 2). However, as the left ventricle overcomes

the obstruction, ejection resumes, and the cusps reopen. The systolic murmur of IHSS is heard after the cusps partially close and then again are forced open. Further flow through the stenotic outflow tract may create turbulence below the valve which in turn results in coarse fluttering of the cusps.

Although the mitral valve SAM is not pathognomonic of IHSS, the additional presence of an asymetrically hypertrophied interventricular septum establishes the diagnosis. In contrast to the concentric hypertrophy of aortic stenosis and hypertension, the septum in IHSS is generally thicker than the left ventricular posterior wall. Thus the ratio of septal/posterior wall thickness at end-diastole typically exceeds 1.3. Histologic examination of the septal musculature reveals atypical whorls, fragmented fibers, and multinucleated cells. However, the finding of asymmetric septal hypertrophy is neither completely sensitive nor specific for IHSS. Some patients with documented IHSS have concentric left ventricular hypertrophy, whereas other patients with right ventricular hypertrophy from mitral or pulmonic stenosis or Eisenmenger's syndrome may also have asymetric septal hypertrophy. Despite the lack of total specificity, asymmetric septal hypertrophy is an important marker of the disease entity IHSS. Many family members of a patient identified as having IHSS may have asymmetric septal hypertrophy but normal mitral valves. It is believed that asymmetric septal hypertrophy may represent the inital pathophysiologic abnormality in IHSS.

Besides being hypertrophied the septum of IHSS is abnormal in other respects. It thickens much less than the posterior wall during systole, and the velocity of systolic contraction is significantly less than that of the posterior wall (Figure 3). These regional abnormalities underscore the fact that IHSS is a cardiomyopathy. It is the compensatory hyperfunction of the posterior wall that accounts for the increased left ventricular ejection fraction in the disorder.

SUMMARY

Thus echocardiography can be used to make the diagnosis of IHSS. This entity with its mitral valve SAM, early aortic cusp closure, and asymmetric septal hypertrophy readily can be distinguished from valvular aortic stenosis, the principal cause of obstruction to left ventricular outflow, with its normal mitral valve motion, calcified aortic valve with probable diminished systolic cusp excursion and concentric left ventricular hypertrophy. Because IHSS usually is treated with B adrenergic blockers while valve replacement is necessary in aortic stenosis, differentiation of the two entities is important and can be made in the non-invasive laboratory.

REFERENCE

1. Kleid JJ, Arvan SB: *Echocardiography: Interpretation and Diagnosis.* Appleton-Century-Crofts, New York, 1978.

Abortion

PRO: The Abortion Controversy: Will It Ever Disappear?

MICHAEL S. BURNHILL, M.D., New Brunswick*

CON: Should We Change Our Attitudes About Abortion?

DIRCK L. BRENDLINGER, M.D., Mount Holly**

PRO: THE ABORTION CONTROVERSY: WILL IT EVER DISAPPEAR?

Michael S. Burnhill, M.D., New Brunswick*

I am deeply saddened by the nature and the virulence of the controversies that still surround the issue of pregnancy termination. Those of us who are particularly concerned with the medical, moral, ethical, legal, social, religious, and psychological aspects of the abortion issue have held countless meetings, conferences and workshops to attempt to reconcile our differences. From these thousands of hours of debate and discussion, from similar thousands of pages of scholarly thought, and from the many court decisions, a number of issues have been clarified, if not resolved.

Legally, the "right" to have an abortion has been affirmed by the U.S. Supreme Court in the decisions handed down on January 22, 1973, Roe v. Wade, and Doe v. Bolton.[1] The court stated, "For the stage prior to approximately the end of the first trimester, the abortion decision and its effectuation must be left to the medical judgment of the pregnant woman's attending physician. For the stage subsequent to approximately the end of the first trimester the State, in promoting its interest in the health of the mother, may, if it chooses, regulate the abortion procedure in ways that are reasonably related to maternal health."

In a subsequent series of decisions it was affirmed that neither the consent of the spouse nor the parent is required; indeed, one need not notify the parents. These actions were felt necessary to protect the constitutional rights of the woman in question.

While these decisions have been widely praised or vilified, depending on one's attitude toward "abortion," they were not restricted merely to the abortion issue. They dealt with the much more fundamental and perhaps more threatening aspects of who controls the reproductive aspects of a woman's life. On this issue, in Roe v. Wade, U.S. Supreme Court Justice William O. Douglas added the following words on the issues of constitutionality relating to persons' rights: "First is the autonomous control over the development and expression on one's intellect, interests, tastes, and personality. Second, is the freedom of choice in the basic decisions of one's life respecting marriage, divorce, procreation, contraception, and the education and upbringing of children. Third, is the freedom to care for one's health and person, freedom from restraint or compulsion, freedom to walk, stroll, or loaf."

What Mr. Justice Douglas was discussing when he raised these issues of state interference with privacy was much broader than abortion. He pointed out that the court spoke to a more basic issue: that a woman is free to decide whether or not to bear an unwanted child.

It is these other issues that figure to a large extent in much of the great opposition to abortion reform. One only has to look at the depth of the opposition to passage of the Equal Rights Amendment to begin to understand the fear and anger with which the idea of a woman controlling her own body has been received.

Medically, there is absolutely no question whatsoever that the legalization of abortion has reduced the morbidity and mortality of abortion.[2,3] Interestingly enough, there has been a decline in both prematurity and perinatal mortality. For interested readers there are several sources of detailed medical data to substantiate these points. It is also true that there have been some deaths and morbidity from legal abortion and that there is some question about future reproduction. However, the results to date indicate that these problems are minor, and raising them constitutes a side issue for the "Pro-Life" supporters.

It is in the area of morality, ethics, and religion where

*Dr. Burnhill is Professor of Obstetrics and Gynecology at Rutgers Medical School, CMDNJ, and Director of Obstetric and Gynecologic Ambulatory Services, Middlesex General Hospital. He may be addressed at the hospital, 180 Somerset Street, New Brunswick, NJ 08903.

**Dr. Brendlinger is a radiologist affiliated with the Burlington County Memorial Hospital, Mount Holly, and the Southern Ocean County Hospital, Manahawkin; he is associate editor of the Burlington County Medical Society bulletin, *The Newsletter*, from which this article is reprinted—October 1978 edition. Dr. Brendlinger may be addressed at Burlington County Memorial Hospital, 175 Madison Ave., Mount Holly, NJ 08060.

clarity becomes confusion and where there appears to be little hope of reconciliation. The questions of whether a fetus is "life," "human life," a "person" or "viable" rise again and again. Thomas J. Silber has reviewed and summarized these questions in a brief but clear article.[4] He quotes Badertescher's interpretation of these conflicting positions

"The liberal orientation understands freedom as autonomy and therefore claims that giving birth, like other human acts, should be freely chosen. The conservative orientation is based on a different concept of freedom; the freedom of the fetus to be considered in any decision on abortion. . . . The liberal views the conservative as fatalistic and insensitive to the pregnant woman, and the conservative sees the liberal as exalting the power of the individual and excluding the defenseless fetus from any protection."

Silber urged both sides to incorporate the concerns of the other side in their position; this does not appear to be taking place.

U.S. Supreme Court Justice Clark summarized the position of the court in Roe v. Wade by saying:

"To say that life is present at conception is to give recognition to the potential rather than the actual. The unfertilized egg has life and if fertilized, it takes on human proportions. But the law deals in reality not obscurity—the known rather than the unknown. When sperm meets egg, life may eventually form, but quite often it does not. The law does not deal in speculation. The phenomenon of life takes time to develop and until it actually is present it cannot be destroyed. Its interruption prior to formation would hardly be homicide, and as we have seen society does not regard it as such. The rites of baptism are not performed and death certificates are not required when a miscarriage occurs."[1]

Socially and psychologically, legalization of abortion has lifted an enormous burden from the shoulders of women. From the dawn of time it has been the woman who has paid the price for an unwanted pregnancy. This price had to be paid whether the pregnancy occurred from rape or incest, after the death or murder of the mate, as a result of contraceptive failure, or sterilization failure. The woman bore the burden but the child and society frequently paid a price as well.

Psychologically the decision to have an abortion is often difficult and painful. However difficult and painful that decision may be, it pales besides the amount of devotion and commitment that is needed properly to raise a child. In the best of all possible worlds one also would make a conscious decision to be a parent and be prepared to raise the child with love. To be unwanted frequently, if not usually, means to be unloved.

If the abortion issue has been dealt with so thoroughly by the courts, why then am I and my "pro-choice colleagues" saddened? We physicians, nurses, and others concerned with the "choice movement" basically are in favor of a woman having the right to choose her reproductive destiny unfettered by substantially uninterested parties who will not have to bear the actual burden. We are pro-choice, not pro-abortion. We are not advocating the killing of "human life, or persons" any more than the ophthalmic surgeon is "anti-eye" when he removes an eye for retinoblastoma, a surgeon is "anti-breast" when he removes a breast for a scirrhous carcinoma, or an orthopedist is "anti-leg" when he removes a leg with osteogenic sarcoma.

We are all healers. It is an act of loving and healing that enables us to act in the interest of the woman and to remove an unwanted pregnancy that presses on her physical or psychological health. Until we all are educated carefully about the joys and responsibilities of loving and parenthood and we have universal access to perfect contraception free from unpleasant or harmful side effects, we believe it to be a basic right of women to reach their full and highest position as human beings.

We, will continue to strive for the provision of safe and humane abortion services as a basic health care right. We will continue to strive for the protection of battered infants and battered wives, and for the protection of the insane, the retarded, and the aged. We are for life!

References

[1]U.S. Commission on Civil Rights: Constitutional aspects of the right to limit childbearing, A report. Washington, D.C., April 1975, p. 1-223.

[2]Center for Disease Control: Abortion surveillance, Annual summary. U.S. Department of HEW, Public Health Service, Atlanta, Georgia, 1977

[3]Tietze, C, Murstein MD: *Induced Abortion: A 1975 factbook.* Reports on Population and Family Planning, No. 14, December 1975.

[4]Silber TJ: Abortion, in adolescence, A bioethical perspective. *J Curr Adoles Med* 2:36, 1980.

CON: SHOULD WE CHANGE OUR ATTITUDES ABOUT ABORTION?

Dirck L. Brendlinger, M.D., Mount Holly**

With increasing vehemence and frequency, the issue of abortion is emerging on the American political scene. It has, for some years, been an issue of great concern to some relatively circumscribed groups such as women's organizations, minority groups, pro-life organizations and, certainly not least of all, to the medical profession. My own attitudes about abortion remained formless for some time mostly because the issue did not touch me directly either in my practice or in my own personal life. Increased media coverage of this matter of late has changed all that and I find myself ever more inclined to one side of this controversy.

I attempted to resolve my own dichotomy of feelings about abortion by posing myself a series of questions.

1. Is the fetus life? One hardly needs to be a doctor to answer this affirmatively.

2. Is the fetus human life? It was once popularly thought that morphology reiterated phylogeny, that is that the stages in the development of the human embryo appear to pass through all the stages that led to the development of humans. It was also said that the human fetus could not be dis-

**Dr. Brendlinger is a radiologist affiliated with the Burlington County Memorial Hospital, Mount Holly, and the Southern Ocean County Hospital, Manahawkin; he is associate editor of the Burlington County Medical Society bulletin, *The Newsletter,* from which this article is reprinted—October 1978 edition. Dr. Brendlinger may be addressed at Burlington County Memorial Hospital, 175 Madison Ave., Mount Holly, NJ 08060.

tinguished from other fetuses and was, therefore, not human.

While it is true that some stages of fetal development resemble those of other life forms, this is not uniformly true and is immaterial in any case. The fact is that the human embryo can be distinguished from embryos of other species at any stage since chromosomal content is species specific. This certainly cannot be done on inspection but since the difference between embryos can be discerned, there is no excuse for assuming such differences don't exist.

3. Is the fetus a person? There is legal history for this point in that the courts have on at least two occasions determined that an unborn fetus does not have the status of a person. Two things make me uncomfortable about that. The first is that legal status merely reflects the opinion of a man. While I am legally bound to observe that decision, I am clearly not morally bound to do so. And the second, of course, is that intellectually I cannot agree that a fetus is not a person, since I am unaware of any means by which personhood can be determined. The question might be raised here pertaining to the presence or absence of a soul in an unborn fetus.

Since matters more basic than the presence or absence of a soul may be considered in deciding whether abortion is acceptable, I consider this question tangential to my decision.

4. Is "fetal viability" a clear-cut dividing point between persons and nonpersons? It is a common practice of those disputing the abortion question to use the term "fetal viability" as the turning point on which arguments may rest. It is asserted that a fetus younger than the age of viability, given as 24 to 28 weeks is not able to survive the extrauterine environment and is, therefore, not to be considered a person. Here again a question arises. What happens when medical technology and information reach the point where fetuses of a much younger age can be supported successfully and brought to term? What happens to the concept of viability then? Are we aborting fetuses today who will be considered people tomorrow?

The age of viability has as its basis the stage at which the organs of the fetus have developed their ability to perform individual functions in the sustenance of life. It is surely true that even a full-term fetus does not have sufficient overall development to survive unaided, lacking a complete nervous system, muscloskeletal development and the essential coordination for survival. Thus the point at which the age of viability is determined depends not only on the amount of development gained by the fetus but the ability of those in the extrauterine environment to sustain his life.

There are those who assert that the degree of dependency upon either intrauterine or extrauterine support is valid criterion by which viability or personhood may be assigned. This immediately raises the specter of whole groups of people such as those mentally retarded, those relying on kidney dialysis or pacemakers and paraplegics being reclassified as candidates for extermination. Why, after all, are the lives of such persons any more precious than those of intrauterine fetuses?

5. When does a woman's right to control her own body take precedence over the fetus' right to survive?

We now come to the position lately held by feminist groups that a woman should have control of her own body. There are those who say that this control extends through the point where a woman has the right to abort an unborn fetus at will. I certainly agree that women should control their own bodies. It should be observed that this is true both before and after conception. Those who favor abortion observe that a pregnancy may be a devastating occurrence in the life of woman and since it does have a great impact on her life, sh should be permitted to choose whether or not to become mother. Again I agree that she should have this choice but think it should be made before conception and not after. Th plight of the unwillingly pregnant woman would be ever s much more deserving of sympathy were there not a wid range of contraceptive devices available for use, including th oldest contraceptive device of all—the words, "not tonigh dear," used when the man or woman is not prepared t prevent conception.

The fetus is not an anatomic part of a woman's body, afte all, though it is certainly parasitic upon her. The feta circulation is separate from the mother's despite the ex change of nutrients, antigens and infectious agents across th placental barrier. To deny this is to suppose that an organism with access to the mother's blood becomes part o her body. I find it difficult to regard a mosquito, for example as a part of a woman's body. The mere fact that the fetus i internalized does not make it part of the body any more tha is a swallowed peach pit part of the body. The argumen might be advanced that tapeworms which are similarly no part of the body and similarly are parasitic upon it ar purged without a twinge of conscience and that the fetu occupies the same position. This argument is so offensiv that it cannot be used effectively.

Since, then, the fetus is not a part of the body, a woma cannot exercise the same control over this as she does ove her spleen or kidney. We have observed before that th precise point at which personhood blossoms is not de termined and thus giving a mother the right to abort a fetu at an early age by extension gives her the right to abort he conceptus at any age. Does your mother have the right to kil you?

6. Do I as a father have any right to make decisions in thi area? Another facet of this question concerns the role of th father in abortion. Since there is no such thing as a fatherless child, the male is inevitably and invariably involved in th creation of a fetus. It is said that fathers all too frequently and almost traditionally decline to accept responsibility fo fetuses for which they are responsible. I don't know if this is true, but it is certainly not just or moral. If this is a tendency or indeed a tradition men follow then it should most certainly be changed. Ask any feminist whether traditions are inviolate. Some assert that a father has no right to make decisions about abortion, but this I most emphatically dispute. I jealously guard the right to protect the individuals who carry my genetic material—my children. Few men in fact would suffer even a mild attack on their children—much less their killing—after parturition. It is thus astonishing to me that men in so many cases accept abortion of their children so meekly.

Is abortion ever justified? It is not easy to answer this question, but for my part, the decision to abort must be recognized for what it is. A conscious decision to kill a human being. There are other occasions in which our society regards that as a legitimate choice. Defense of self against mortal attack, wars and, some would say, the death penalty for criminal acts are examples. In any such case, the decision must regard both the mother and the unborn fetus as individuals and not be based on any derogation of the status of the unborn as human beings.

7. Don't social needs override fetal survival rights? I was surprised to find that those who support abortion used as a mainstay of their argument the assertion that social conse-

quences of pregnancy were of overriding importance. Teenagers were often cited as the classical examples of unwanted pregnancy's social impact. The rapee, poor and/or unmarried women, and those who carry fetuses endangered by disease or evil genes are others pressed forward as cause célèbre for abortion. It is clear that all these people suffer because of pregnancy and that each of these particular cases deserves specific sympathetic consideration and, probably, a unique solution. They are not, in fairness to each, to be considered as a group. What justifies abortion in one case might not in another. In any case the basic question again arises—What circumstance justifies killing a human being?

It is true that some children are unwanted by parents—one or both—but no one condones killing a child after birth merely because it is unwanted. Why should we condone it at all? It is particularly wrenching to oblige teenagers to carry pregnancies to term, but consider this: Intercourse is a voluntary act, with attendant risks and responsibilities. Perhaps teaching regard for risk and responsibility receives too little emphasis in our time, but that cannot alter the truth that someone dies with each abortion.

What, you say, of those desperate women who seek abortion from back-alley, "coat-hanger" surgeons? What of their dying and morbidity? This, too, is a conscious choice—one in this case between childbearing and killing a human. If I disapprove of murder by adults of adults how can I approve killing fetuses by abortion? By what distortion of logical process can I pity such women more than those killed by abortion?

I remarked earlier upon the existence of legal opinion holding that the fetus is not a person. In a striking contrast, the Massachusetts Supreme Court, ruling on a case in which parents wanted chemotherapy withheld from a leukemic two year old, said, that parental rights "do not clothe parents with life-and-death authority over their children."

Even more powerful was the decision by the West German Supreme Court in 1974 to strike down an "abortion on request" law. Here's what the Court said:

"Let other nations do as they please. We know from bitter experience the enormities that result from denial of the sanctity of human life, the assumption that some lives are 'worthless' and hence disposable at the whim of the individual or the will of the State. Human life represents an ultimate value. The process of human development is a continuing process, permitting no sharp demarcation."

Help for Impaired Physicians

Through its Committee on Impaired Physicians, MSNJ helps doctors who are suffering from alcoholism, other drug addiction, psychiatric disorders, or senility. The thrust of the program is rehabilitative, not punitive. The Committee is composed of physicians who have special expertise in these areas, some from personal experience. Effective treatment for these illnesses is achieved most easily when the disease is detected early and family, friends, and associates are urged to avoid misguided sympathy which enables the condition to deteriorate.

HELP US TO HELP

Call the Physicians' Confidential Assistance Line (609-896-1884). Only specially trained personnel will answer or return your call.

DOCTORS' NOTEBOOK

Trustees' Minutes April 20, 1980

A regular meeting of the Board of Trustees was held on Sunday, April 20, 1980, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county medical society. A summary of significant actions follows:

Joint Executive Committee Meeting—MSNJ/NJHA . . . Approved a recommendation that a joint meeting of the Executive Committee of the Medical Society of New Jersey and the New Jersey Hospital Association consider the revision of the Voluntary Cost Containment Committee of New Jersey contemplated by the Hospital Association and the need for bylaw changes by hospitals reimbursed under the DRG system.

Federal Election Commission . . . Approved a recommendation of the Executive Director that the Board authorize entry into a Conciliation Agreement offered by the Federal Election Commission to have JEMPAC agree to file reports on an affiliated basis, and to honor the commitment to consider a contribution from JEMPAC and/or AMPAC to be from one source and subject to the Federal Election Law limits.

Note: In accordance with an agreement reached with the AMA and the Federal Election Commission, political action committees (PACs) are considered affiliated with AMPAC. The Medical Society had been charged with a technical violation that JEMPAC reports did not indicate an affiliation with AMPAC; however, the Commission recognizes that until a formal declaration existed, this was a reasonable course to follow.

Financial Statements . . . Accepted MSNJ financial statements for nine months ending February 29, and ten months ending March 31.

American Society of Association Executives (ASAE) Evaluation Report . . . Noting that the evaluation report of the ASAE suggests alterations in the structure of the Society, voted to defer discussion on the report pending receipt of comments from the county societies, a membership survey, the Standing Committee on Revision of Constitution and Bylaws, the Special Committee on Long Range Planning and Development, and department administrators (Doctor Krosnick and Messrs. Johnson, Lucci, Maressa, Rouse, and White). Progress reports are to be submitted prior to the October 1980 meeting of the Board of Trustees.

Membership . . . Noted that MSNJ paid membership as of April 7, 1980 was 6,910—210 more than at the same time in 1979; AMA membership as of March 31, 1980 was 5,542.

Prepaid Legal Service . . . Noted that over 1400 members of MSNJ have enrolled in the prepaid legal service plan concerning informal hearings before the State Board of Medical Examiners (see *JMSNJ* 77:296 (April 1980). The lawyer who will provide this service presented the program (which has been registered officially with the New Jersey Supreme Court) at the April 17 Conference of Presidents and Presidents-Elect.

CMDNJ Report . . . Received a report from the President of the College of Medicine and Dentistry of New Jersey which highlighted the following:

1. An investigation of four maternal deaths at CMDNJ-Martland Hospital Unit between December 1978 and December 1979 is being carried out by the CMDNJ Board, the Executive Committee of the Hospital and the State Board of Medical Examiners. When completed, the findings will be made public.

2. Representatives of MSNJ are invited to participate in events planned to celebrate the tenth anniversary of the founding of CMDNJ, one of which is a dinner-dance to be held at Princeton University on November 15.

3. An alleged rating of American medical schools carried out by a commercial journal entitled *Private Practice,* which was unfavorable to CMDNJ, has been released. The College considers the study to be poor and unfair, and President Bergen has written a letter to this effect to all deans of medical schools in the United States and invited them to make an on-site appraisal of New Jersey medical schools.

4. College-affiliated hospitals have been under pressure to accept contracts for the training of students from newly developed schools in the Caribbean area, one of which is Grenada. The affiliated hospitals have been reminded that contract relations precluded students from other medical schools in those facilities unless approval is given by the dean of the school involved. The State Board of Medical Examiners also is involved in this issue through the accreditation process and pointed out that no educational programs are to be conducted in the State of New Jersey without the permission of the Department of Higher Education. The question appears to be the legality of the programs and the course of action to be taken by the schools lacking clinical facilities.

Countersigning of Medical Orders . . . Received the following resolution from Hunterdon County Medical Society, which will be presented to the 1980 House of Delegates as a resolution from the Board:

Whereas, New Jersey has need for well-educated and competent physicians; and

Whereas, the education of medical students should be enhanced by rules that promote the learning situation; and

Whereas, the protection of the patient is of paramount concern to his/her attending physician during hospitalization, requiring direct supervision of medical students by the licensed attending physician; now therefore be it

RESOLVED, that MSNJ seek a review by the State Board of Medical Examiners of the status of countersignature of medical orders written by medical students to insure that medical-order writing remains a valuable component of the educational process, while

assuring the protection of the patient by requiring all written orders to be done under the direct supervision of a licensed physician who must countersign the orders before they are carried out or any medications or treatment rendered.

New Jersey Hospital Association . . . Received the following comments from the President of the New Jersey Hospital Association:

1. Agreed that a joint meeting of the executive committees of MSNJ and NJHA to discuss the cost-containment program in New Jersey would be worthwhile and effective in presenting a united front.

2. The Hospital Association's Board has taken a policy position for medical staff and hospital bylaws on the completion of medical records and will discuss these with the Executive Committee of MSNJ before sending recommendations to the hospitals.

3. The question concerning rates for hospitals to be reimbursed under the DRG system beginning May 1, 1980 has been brought about through the discovery that no approval has been given for a Medicaid/Medicare waiver. The rates were structured on the basis of such a waiver.

Emergency Medical Services Critical Care Task Force Reports . . . Approved the following substitute recommendation concerning the Emergency Medical Services Critical Care Task Force Reports:

That the Medical Society of New Jersey approve the concept of planning for emergency medical services but requests the New Jersey Department of Health to respond to specific task force recommendations before approval is given to the reports of the Task Forces.

The major thrust of the Burn Care Task Force Report was a recommendation that hospitals which demonstrate experience and expertise in burns be eligible for a designation of "Burn Program," to treat major as well as moderate and minor burns without the need to dedicate beds to burn care alone. Such a designation appears to satisfy the concern that all burn patients would have to go to burn units. The program was recommended by the Task Force as an experimental one, with ongoing review over the first two-year period to determine whether to continue or change direction.

Transfer Arrangements of New Jersey Hospitals . . . Approved a recommendation that the matter of developing a format for transferring patients (from one facility to another) be referred to the Committee on Emergency Medical Care.

Federal Trade Commission Proposed Regulation . . . Accepted a statement from the Executive Director in response to a request from the FTC for input from the Society on a proposed ruling of the FTC dealing with physician participation on boards of Blue Cross/Blue Shield:

The position of the Medical Society of New Jersey is that there should be no limitation on the number of physicians elected or appointed to the Board of any Blue Cross or Blue Shield Plan; and that individuals should be elected to these Boards, based upon their achieving a majority vote of the policyholders/shareholders, as in any other corporate structure or insurance entity.

Voluntary Second Opinion Program . . . Approved the following recommendation from the Council on Medical Services concerning MSNJ's co-sponsorship of the Metropolitan Life Insurance Company's Voluntary Second Opinion Program (the Executive Director pointed out that no company or organization will have a valid data base on second opinions unless the program is mandatory):

That although the Medical Society has endorsed certain program concepts in the past, it should not set a precedent by endorsing a specific commercial venture, and therefore the Medical Society of New Jersey should not co-sponsor the Metropolitan Life Insurance Company's Second Opinion Program. Metropolitan Life Insurance Company should be notified, however, that MSNJ would welcome the opportunity to advise it on the setting up of this program and would further welcome receiving any reports and statistics produced by its implementation.

Finance and Budget . . . Approved the following recommendations from the Committee on Finance and Budget:

(1) That the budget for 1980-81 in the amount of $2,222,000 with $1,750,000 to be raised through member assessments be adopted.
(2) That the 1981 assessment be set at $230 per regular dues-paying member.
(3) That the 1981 assessment be set at $20 per member for affiliate and associate members.
(4) That the 1981 assessment be set at $5 per student for medical students.
(5) That a special assessment of $20 be levied for the New Jersey Foundation for Health Care Evaluation.

Well Baby Clinics/Child Health Conferences . . . Approved the following recommendation from the Special Committee on Child Health:

That the Board of Trustees support the principle of the "Well Baby Clinics" or "Child Health Conferences" for those in need. However, it decries the less than optimal system that fractionates medical and health care by not providing continuing and comprehensive care for infants and children that best can be provided in the setting of a qualified and experienced medical practitioner's office.

Note: The above is in response to a communication from the Union County Medical Society on the operation of well baby clinics or child health conferences at various locations in New Jersey.

IPA Project . . . Received as informative a report from the New Jersey Foundation for Health Care Evaluation addressing the major issues related to recommendations on the IPA Project which were approved by the House of Delegates at its special session in November 1979. The complete text of the report appears in this issue of *JMSNJ* (77:457, June).

. . . Approved a recommendation which will establish a formal, bi-monthly reporting mechanism with the Foundation.

Ad Hoc Committee to Review Insurance Benefits for Psychiatric Care . . . Received as informative a progress report from the Committee on a recent meeting with representatives of the New Jersey Psychiatric Association.

Smallpox Vaccine—Resolution #26 (1979 House of Delegates) . . . Accepted the Council on Public Health's recommendation that no further action be taken on Resolution #26, noting that smallpox is now considered to be eradicated, and there is no longer any indication for smallpox vaccination for anyone. For travel to countries which still request smallpox vaccination, a physician can note on his prescription pad that the smallpox vaccination may be medically contraindicated. The Center for Disease Control agrees with this practice.

Deaths Reportable to the Office of the Chief Medical Examiner . . . Approved the following recommendation from the Council on Public Health:

That the New Jersey State Medical Examiner clarify for county medical examiners the state law regarding the medical examiners' system including perioperative deaths, maternal deaths (associated with delivery or abortion, legal or criminal) and certain deaths of particular public health significance (typhoid fever,

food poisoning, Legionnaire's Disease, and others), and also clarify the requirement for reporting deaths occurring within 24 hours of admission to a facility.

Mandatory School Screening of Hearing —S-3026 . . . Approved the following recommendations from the Council on Public Health, the first of which will be sent to the Department of Education and school physicians:

1. That the Committee on Conservation of Hearing and Speech believes that it is in the individual's best interest to be referred to a physician knowledgeable in diseases of the ear for the diagnosis and treatment of hearing deficits.
2. That the Committee on Conservation of Hearing and Speech present a two-hour program for the Societies of Family Practice and Pediatrics to be held at their state meetings. The program will include demonstrations and lectures on the use of impedance audiometers and on recognizing various diseases of the ear.

Eye Health Screening Program . . . Approved a recommendation that the 1980 Eye Health Screening Program be conducted during the week of September 21.

Medical Assistance Advisory Council . . . Empowered the President-Elect to select potential nominees to fill a provider vacancy on the Medical Assistance Advisory Council. (Dr. Norman Zanger of Westfield, whose term of office will expire on December 31, 1980, has resigned recently.)

Summer Student Research Fellowship Program . . . Authorized an appropriation of $1,000 to support the Summer Student Research Fellowship Program of CMDNJ.

Report from NJ Foundation for Health Care Evaluation on Recommendations of the MSNJ Task Force on the IPA Project

As per your request to review and report back to the Board of Trustees on the recommendations proposed by the Task Force on the IPA Project, and approved by the House of Delegates, we respectfully submit the following response to you for consideration.

BACKGROUND

The New Jersey Foundation for Health Care Evaluation initiated its activities with regard to prepaid medical care programs in 1975 with the formation of the first IPA Study Group under the Chairmanship of Richard E. Lang, M.D. The IPA, or Individual Practice Association/Health Maintenance Organization (HMO), was viewed by many physicians as a more acceptable approach to this form of medical care delivery system as proposed in the HMO Act of 1973 (PL 93-222). Although the format and agenda of the IPA Study Group was informal, their work and analysis provided the NJFHCE with a factual basis upon which to develop its policy and activities in response to these developments in New Jersey. As physician interest in the IPA/HMO grew, so did the involvement of the Foundation in response to their needs.

In December 1977, an IPA Resource Center was established to provide physicians and their component medical societies with the following services:

1. *Education* to assist physicians in making informed decisions regarding health maintenance organizations;
2. Limited *technical assistance* to evaluate alternative approaches for planning and developing local organizations; and finally,
3. Information regarding *legislation and government regulations.*

Between December 1977 and January 1980, the number of physicians actively engaged in operating IPA-type HMOs in the State of New Jersey increased from approximately 100 to nearly 1,500. Many more physicians are involved with group practice-type HMOs and with plans which are in the planning stages of development (Attachment #1). This growing constituency of HMO physicians represents an important and serious challenge to their representative organizations.

At the special meeting in December, the 1979 House of Delegates of the Medical Society accepted and/or adopted seven (7) recommendations presented by the Task Force on the IPA Project (Howard D. Slobodien, M.D., Chairman). At the Board of Trustees meeting on December 16, 1979, MSNJ referred these recommendations to the Foundation for review and consideration.

ANALYSIS

The following analysis will discuss briefly each of the recommendations, in terms of current or proposed Foundation and MSNJ actions required, in the order in which they were presented:

Recommendation 1—That the Medical Society of New Jersey assist in providing informational material in the development of physician-sponsored IPAs where local physician interest is demonstrated and where need exists.

Since the establishment of the IPA Resource Center, the Foundation actively has been developing educational materials, providing information related to HMO legislation and regulations, maintaining a resource library of feasibility studies, statistics and other data, referral services and limited technical assistance, as well as staff services to county medical societies interested in exploring the IPA-model/HMO. There are, presently, at least seven ad hoc committees involved in these activities at the county level (Map 1).

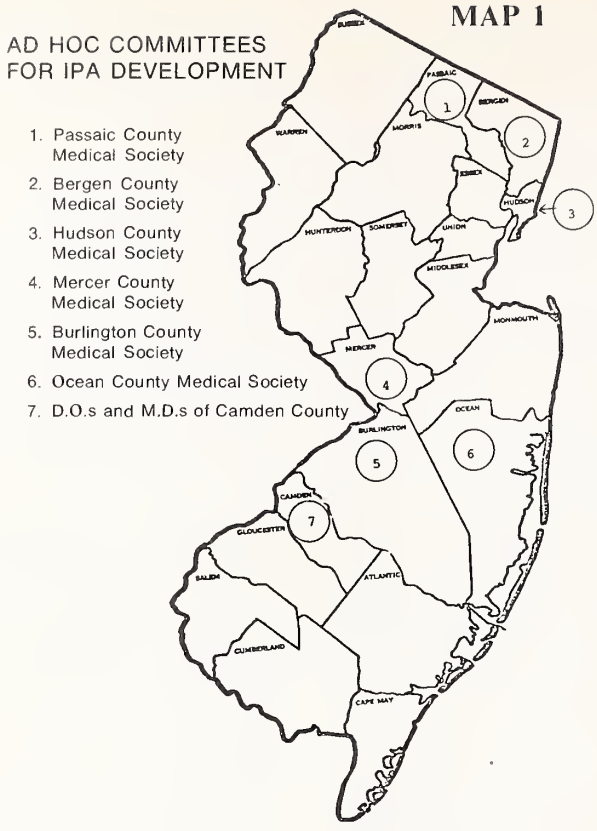
One important contribution to this education effort was the development of a 15-minute audio-visual slide presentation which describes the essential elements of an IPA/HMO. This presentation has been made available to local societies and interested physicians' groups for use in small groups and staff meetings.

Although this recommendation was accepted by the House of Delegates as informational, we consider this action an affirmation on the ongoing efforts of the Foundation to provide physicians with clear and accurate information on the subject of prepaid medical care delivery. We feel this service is essential if physicians in New Jersey are to continue to make informed decisions regarding the provision of their services, methods of reimbursement and mode of delivery. The Board of Trustees of the NJFHCE remains committed to this educational task.

Recommendation 2—That the Medical Society of New Jersey provide educational services to physicians on the status and future of prepaid health care programs.

In addition to the services outlined above under Recommendation 1, the Foundation has been responsible for organizing seminars and formal presentations on the subject of health maintenance organizations. Our first statewide IPA/HMO conference, in December 1977, attracted nearly 100 physicians. Since that time staff, with the

MAP 1



voluntary assistance of interested physician members, has met with a number of medical staffs and county societies to present information on the current and projected status of HMOs in New Jersey and nationally. These meetings generally have been well attended and constructive.

Despite limited staff, as well as the constraints of time and travel, the Foundation plans to continue these local presentations and to maintain contact with local physician groups. It is imperative, however, that the need for these educational services be the subject of regular review by MSNJ and the Foundation in order to assure their continued availability.

Recommendation 3—That the Medical Society of New Jersey assist in the formation of a voluntary organization of IPAs.

There are presently four functioning IPA/HMOs in the State of New Jersey: CoMED, ECHO/Crossroads, Atlantic Cape/Southshore, and SIMA, with a combined membership of more than 1,500 physicians. The Central Jersey IPA, which was formed as part of the Mid-State HMO, expects to be operational some time in 1981 with an initial membership of between 300 and 400 physicians. At present, no organization exists to represent and assist this growing physician constituency.

In June 1978, the Foundation proposed the establishment of an IPA Consortium (Attachment 2) to address some of the needs of IPA member physicians. Although the need was apparent and enthusiasm for the organization was generally high, several problems ensued regarding its function and role, particularly between the developing and operational plans.

Much has changed since that initial effort and the valuable information acquired from that experience can be applied toward the implementation of this recommendation. For example, the recent actions of the Federal Trade Commission to undermine the physicians' policy-making role in the IPA/HMO, the managerial failures of plans such as Choice Care in Colorado and Central Essex in New Jersey, as well as similar issues have focused the concern of many physicians on the need to organize voluntary associations to protect their interests. A formal organization of IPA physicians could provide, or arrange for, the necessary legal and managerial expertise required to address these issues and deliver member services (See also Recommendation #7). The Medical Society of New Jersey can be an important vehicle toward realizing this goal.

Prior to implementing this recommendation, the Foundation suggests the following steps be considered and approved by the Medical Society:

a. An ad hoc committee be appointed by the Board of Trustees of MSNJ composed of physicians who are knowledgeable of and sensitive to the issues affecting IPA physicians.

b. That this committee plan to meet with the medical directors of each of the operational IPAs for the purpose of identifying mutual goals and objectives.

c. That an organizational model be developed which best can serve to meet the goals and objectives identified.

d. That a reporting mechanism and funding source be identified in order to insure the functioning of this organization.

The Foundation and MSNJ staff should be employed to assist the above committee in undertaking this important project. As previously reported in this document, growing physician interest and participation in prepaid medical care systems demand a vigilant and focused effort to insure the professional integrity of the medical community and the quality of services provided through these plans. A voluntary organization of IPAs in New Jersey, as proposed by the Task Force, would provide a positive move in that direction.

Recommendation 4—That the Medical Society of New Jersey continue to study the progress of existing HMOs, consult with experts on prepaid health care, and be aware of the efforts of government, industry and labor in this regard.

Health Maintenance Organizations, especially those which are federally qualified, are subject to intensive review and compliance regulations by local and federal agencies. In addition, the law requires these plans to develop internal management systems to monitor their day-to-day operations. Despite these rigid controls some HMOs are failing and, to date, two plans in New Jersey have gone into receivership (Central Essex Health Plan and the Group Health Plan). Choice Care, in Fort Collins, Colorado, had been considered one of the country's more successful IPA plans prior to its recent collapse on January 1, 1980. These incidents of financial failure and poor management concern us—particularly with regard to their impact on patient and physician members alike.

In order to keep abreast of these developments, both the positive and the negative, the Foundation has maintained an active role as a member of national organizations, such as the American Association of Foundations for Medical Care, and on local committees, e.g., State HMO Advisory Committee. Furthermore, to assure physi-

cians access to up-to-date information, we recently organized a Council on Alternate Delivery Systems. The primary objective of the Alternate Delivery Systems Council is to study the various issues related to prepaid health care plans. The Council, which meets quarterly and includes physician representatives from each county, invites speakers who are experts in the field to discuss these issues. (The Academy of Medicine recently accredited these meetings based on their educational value).

The Foundation's *Newsletter* regularly publishes information on the status of HMOs for its physician readers. Finally, the Foundation subscribes to numerous publications, including the Federal Register and requests all available literature for its files. The task of reviewing these materials, attending relevant conferences and dispensing information to interested groups has proved to be an increasingly time-consuming activity. However, we feel this is an important function for the Foundation's staff and we will continue diligently to pursue this matter.

Recommendation 5—That the performance and effectiveness of operating HMOs in New Jersey be the subject of continuing study and scrutiny.

Presently there are nine operating HMOs in New Jersey of which four are IPAs. (Map 2). A fifth IPA/HMO, the Mid-State Health Plan, is expected to begin operations in 1981. It is important to note that the organizational structure, management and financial support for each of these HMOs varies; while some plans are federally funded, for example, others were developed through third party insurers (Blue Cross) and private initiative.

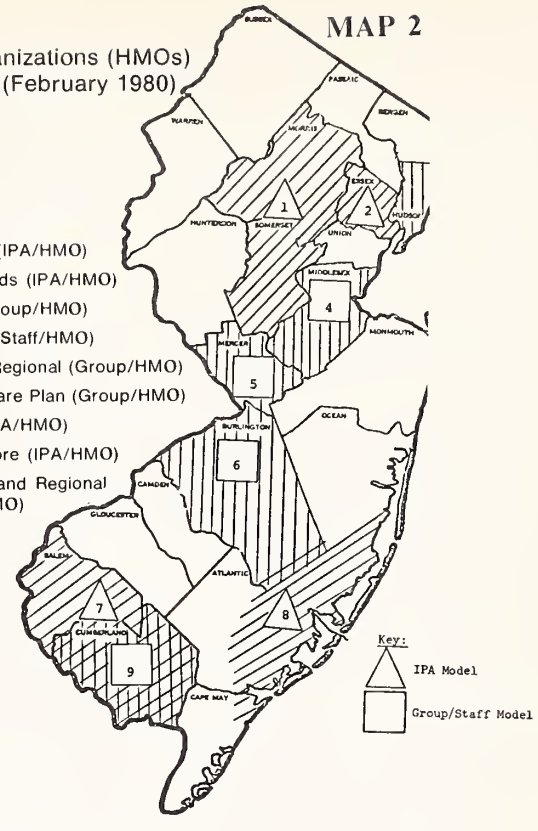
A variety of information is available through local, state and federal agencies, as well as directly from the plans themselves. The Foundation, for example, calculates enrollment figures on a quarterly basis, examines annual reports, evaluates IPA contracts, reviews premiums and utilization data, and so on. However, no formal mechanism exists at present for collating and analyzing this information on a statewide basis. Unfortunately, staff and budget limitations severely handicap the Foundation's efforts to expand these activities.

Proposed changes in the budget (Attachment #3) as well as expanded sources of funding, would be required to implement this recommendation adequately and to enable meaningful evaluations of the operating HMOs in New Jersey. One possible approach currently being investigated by the Foundation would be the establishment of a "coalition" of various health-related groups to review these programs. Privately organized and financed coalitions of this type have been functioning successfully in many parts of the country and are assuming an increasingly important role in influencing medical care delivery ("A Report on Coalitions to Contain Health Care Costs," October 1979, Government Research Corporation). The Board of Trustees of the NJFHCE will explore these options, as well as continue its current efforts in this regard.

MAP 2

Health Maintenance Organizations (HMOs) Operating in New Jersey (February 1980)

1. COMED (IPA/HMO)
2. Crossroads (IPA/HMO)
3. H.I.P. (Group/HMO)
4. Rutgers (Staff/HMO)
5. Mercer Regional (Group/HMO)
6. Health Care Plan (Group/HMO)
7. SIMA (IPA/HMO)
8. Southshore (IPA/HMO)
9. Cumberland Regional (Staff/HMO)



Recommendation 6—That the quality of care of HMOs should be examined in order to protect the HMO subscriber and the professional integrity of IPA member/physicians.

Health Maintenance Organizations are under increasing public scrutiny as they become larger, more visible and a more significant part of the national health care delivery system. Concern regarding the quality of care provided by these plans is one aspect of this public attention.

Two sections of the HMO Act of 1973 (PL 93-222) provide the basis for the quality assurance policy of the Office of Health Maintenance Organizations (OHMO). Section 1301 (c) (8) requires that each HMO shall—

". . . have organizational arrangements, established in accordance with regulations of the Secretary, for an ongoing quality assurance program for its health services which program (a) stresses health outcomes, and (b) provides review by physicians and other health professionals of the process followed in the provision of health services."

Related to the requirements for quality assurance programs is Section 1301 (c) (11) (c) which requires each HMO to

". . . provide, in accordance with regulations of the Secretary (including safeguards concerning the confidentiality of the doctor-patient relationship) an effective procedure for developing, compiling, evaluating, and reporting to the Secretary statistics and other information (which the Secretary shall publish and disseminate on an annual basis and which the health maintenance organization shall disclose, in a manner acceptable to the Secretary, to its members and the general public) relating to the availability, accessibility, and acceptability of its services."

Final regulations pertinent to quality assurance policy were published in the *Federal Register* in July 1979. Those regulations amplified the provisions of the Act by requiring that all HMOs have internal quality assurance programs which

1. stress health outcomes to the extent

consistent with the state of the art;
2. involve physicians and other health professionals in the review of the process of health services;
3. systematically collect and interpret data, and disseminate the results to practitioners;
4. is "likely to meet the standards" for Professional Standards Review Organizations (PSRO); and
5. have written procedures for taking remedial action when problems are found.

In response to the provisions of the Act and subsequent regulations, HEW's Office of HMOs (OHMO) has devised a strategy for implementation of its quality assurance policy (Attachment #4). Our comments will focus on Sections V and VI of that document, i.e., external assessments and HMO/PSRO relationship.

Section V clearly states that "the responsibility for these external assessments would be delegated to a private organization." Furthermore, "the majority of the governing body of the organization would be composed of physician representatives of the HMO industry . . ." Finally, "this organization will be funded by OHMO." Given the Foundation's extensive experience in developing quality assurance criteria and in establishing professional standard review organizations, we feel that we are suited ideally to fulfill these requirements and to implement a program to coordinate external assessment of HMOs. Initial inquiries are underway to explore this project with the OHMO.

Similarly, the Foundation serves as the administrative arm of the Professional Standards Review Council. As such, it is uniquely qualified to determine the compatibility of any quality assurance strategy for HMOs with the criteria currently employed by PSROs.

With the support and direction of the Medical Society, as contained in Recommendation 6, the Foundation will continue to evaluate this task and to report to the Board of Trustees on its progress.

Recommendation 7—That the need for legal and/or administrative assistance to IPA member physicians should be discussed and evaluated to determine if this service could be provided through an association of IPAs or some other source.

Individual practice associations represent separate and distinct corporate entities from the HMOs with which they contract to deliver medical care services. As such, they are required annually to negotiate their contract agreements, fee schedules, risk sharing arrangements, and so on with the plan. Some of the differences in these contracts have been identified by Foundation staff in order to assist physicians in understanding their relationship and obligations under those agreements (Attachment #5).

Implementation of this recommendation clearly is linked to the success of Recommendation 3 discussed earlier, i.e., the formation of a voluntary organization of IPAs in New Jersey. The Foundation strongly supports the notion of such a voluntary organization and would welcome the opportunity to work in concert with the Medical Society of New Jersey to evaluate and define a strategy for its establishment posthaste. We reiterate the importance of designating an ad hoc committee to expedite this project.

SUMMARY

In conclusion, we have attempted to identify and address some of the major issues related to the recommendations approved by the House of Delegates. As we noted in our discussion, several of the recommended activities presently are performed by the Foundation as part of its commitment to the IPA Resource Center and the Council on Alternate Delivery Systems. Specifically, Recommendations 1, 2, 4, and 5 above are included in the Foundation current activities.

Furthermore, the Foundation's Board of Trustees supports the Medical Society's proposed expansion of activities as contained in Recommendations 3, 6, and 7. We hope that our comments with regard to these recommendations will be helpful to the Board of the Medical Society of New Jersey in determining its strategy for implementation.

As always, the Foundation stands ready to serve the Medical Society in realizing its goals and objectives to serve its membership's needs. If we can be of any further assistance to the Board, or should you require any additional clarification of the information contained in this report, please specify those requests.

Finally, in the interest of continuity and control, we **recommend** that the Board of Trustees of MSNJ consider establishing a formal, bi-monthly reporting mechanism with the Foundation. It is our hope that these reports would serve to keep the Board abreast of our efforts with respect to the implementation of the above recommendations.

(The above recommendation was adopted by the Board of Trustees on April 20, 1980.)

(Attachments on following pages)

PHYSICIAN PARTICIPATION IN HMO PLANS IN NEW JERSEY
December 1, 1977 – January 1, 1980

PLAN	TYPE	12/1/77*	1/1/80***
Central Essex Health Plan	Group	5	--
Cumberland Regional Health Plan	Staff	10	18
Health Care Plan of New Jersey	Group	10	30
Mercer Regional Medical Group	Group	12	N/A
Rutgers Community Health Plan	Staff	15	41
Group Health Plan of New Jersey	Group	5	10
Newark Comprehensive Health Plan	Group	5	5
Southshore Health Plan	I.P.A.	60	145
Crossroads HMO	I.P.A.	--	1,050
CoMED	I.P.A.	--	377
S.I.M.A.	I.P.A.	--	70
TOTALS		122	1,746+

* Estimated

*** Does not include specialists and/or fee-for-service participating physicians.

Attachment #2

A Proposal for the Establishment of an IPA Consortium by MSNJ

(Prepared by the New Jersey Foundation for Health Care Evaluation—Revised October 1978)

I. Summary—Physicians in the State of New Jersey are committed to the delivery of quality medical care which is both accessible and available at a reasonable cost to their patients. As private practitioners, they also are deeply concerned with protecting the integrity of the physician/patient relationship, which has been established over a period of years—or generations—of practicing medicine in a given community.

At the same time, physicians are keenly aware of the dual problems of spiraling health care costs and consumer demand for increasingly sophisticated services. Increased government regulation and legislation are being directed toward these ends. Representatives of the business community, who share much of the cost for financing health benefits' programs, also have begun to demonstrate an interest in exploring alternative health care delivery systems for their employees.

Much attention is currently being focused on the *Health Maintenance Organization* (HMO) as an approach to some of these problems. Physicians in New Jersey have begun to explore the HMO concept through the formation of *Individual Practice Associations* (IPAs). More than 1,200 practicing physicians have contributed time and energy toward the planning and development of these IPAs in the respective communities.

In recent months Federal and State agencies have initiated programs intended to stimulate further interest in HMOs and their potential impact on health care delivery and costs. To date, however, resources are scarce and start-up costs can be prohibitively high for the individual group without Federal subsidies. Furthermore, there have been few opportunities for the private sector to become directly involved in the planning and development of these programs.

The Medical Society of New Jersey, as a representative of physicians, can provide the level of leadership required to address many of these issues and problems. In cooperation with the New Jersey Foundation for Health Care Evaluation, MSNJ proposes to organize a *consortium* of IPAs in this State in order to maximize the use of limited resources, and to coordinate the development of peer review and quality assurance programs. In addition, this organization will provide a role for the private sector and the business community to participate in the planning and implementation of a State-wide program for the delivery of health care to the people who live and work in the State of New Jersey.

II. Goals—

- To promote and support the establishment of Individual Practice Associations (IPAs) of physicians in the State of New Jersey.
- To render these organizations (IPAs) efficient and cost effective.
- To insure the quality of care provided through these organizations (IPAs).
- To maintain competitiveness in the marketplace of the programs offered through these organizations (IPAs).
- To permit and encourage the participation of the private sector in planning and development of these organizations (IPAs) in the State of New Jersey.

III. Introduction—The Medical Society of New Jersey was founded in 1766 and chartered in 1864 as a professional organization of physicians. MSNJ has included among its primary goals "to enlighten and direct public opinion in regard to the problems of medicine and health."

Few would deny that the advancements in medical care and technology that have been achieved in this country are worthwhile and desirable. However, much attention and concern is being focused today on the rising costs of health care and the manner in which

these programs are financed. Health care costs have escalated over the decade from 1966 to 1976 with annual expenditures climbing from $42 billion to $137 billion. Because inpatient hospital care represents a major portion of these expenditures, some analysts and program planners have been advocating more comprehensive benefit plans which emphasize the use of ambulatory care services when appropriate. In addition, prepayment, capitation type of financing is being introduced as a means of involving providers in some of the financial risk of delivering medical care services. The combination of these two concepts are incorporated in the model known as a Health Maintenance Organization. According to the federal guidelines, an HMO is defined as:

- A comprehensive set of health care services;
- Offered to a voluntarily enrolled population;
- For a prepaid, prefixed cost.

HMOs have been in existence now for more than 40 years with varying degrees of success and acceptance by provider and consumer groups. The more commonly known HMOs, such as Kaiser-Permanente and the Health Insurance Plan of Greater New York (HIP), have been structured around a group practice of health professionals—physicians and ancillary personnel who provide patient services in a centralized, ambulatory care setting. Many advantages and disadvantages to this type of organization have been cited. The group practice models emphasize their ability to control utilization, decrease hospitalizations and reduce cost. On the other hand, the restructuring of the medical care delivery system involved in achieving these ends can be disruptive, time consuming and costly. Similarly, the use of a centralized, ambulatory care facility seriously can affect the patient's access to care, as well as to depersonalize the physician/patient relationship. For these reasons and others, the group practice HMO has not been enthusiastically embraced by the medical community.

More recently, however, the Individual Practice Association (IPA) has been attracting considerable attention as a viable alternative to the group practice model. The IPA, which is also called an "open panel" HMO, is organized around community-based, fee-for-service physicians and existing health care facilities. Rather than reorganizing the delivery system—in terms of providers and facilities—the IPA/HMO modifies the system by applying the concepts of prepayment, peer review, and a comprehensive benefits package. Hence, physicians can continue to treat their own patients in their own offices. Reimbursement continues to be based on the delivery of services—that is, on a fee-for-service basis—with physicians sharing the risk for any unnecessary utilization. By contracting for a broader range of health care services and maintaining a quality assurance program, the IPA allows physicians to treat their patients at the most appropriate level of care required. The result is a plan which combines the best features of a traditional health care system with the economic incentives inherent in a prepaid, comprehensive care, delivery model.

Furthermore, the IPA/HMO is a cost effective system. In addition to eliminating the need for initial capital expenditures—since no new facilities are needed—overhead and administrative cost are minimized as well. Since physicians continue to treat their own patients together with those enrolled in the HMO, the time required by the plan to "break-even" is considerably less. Finally, the open panel, multi-site Individual Practice Association appeals to employers whose employees reside over a broad geographic area and who have established relationships with their community physician.

IV. Background—The New Jersey Foundation for Health Care Evaluation, an organization sponsored and supported by the Medical Society has been examining HMO activity in this State as early as 1975 when this concept first began to attract the interest of physicians. The Foundation, which has as a primary goal "assuring accessibility of quality medical care, at appropriate cost, to the residents of New Jersey," has been in operation for over five years. Among its major objectives, NJFHCE has been involved in developing a peer review system in this State, as well as participating in numerous projects concerned with health care delivery and financing. It seemed appropriate then, for the Foundation to also address itself to the issue of Health Maintenance Organizations (HMO) with regard to its impact on the quality of health care delivery.

Over the past several months the NJFHCE has, in fact, been intensifying its efforts to inform and assist physician groups interested in the concept of an Individual Practice Association. In response to specific requests, individual seminars have been conducted around the State, including: the Hunterdon Medical Center, the Hudson County Medical Society, the Princeton Medical Center, the Cumberland, Somerset and Essex County Medical Societies. In addition, on December 7, 1977, over 100 physicians attended a one-day seminar on IPAs in North Brunswick, organized by NJFHCE. This proliferation of interest in IPA/HMOs has placed a heavy demand on the Foundation's staff, not just for information, but increasingly, for direct services.

As each of these physician groups becomes more interested in the "concept" of an IPA, it must address itself to the more technical aspects involved in developing an operational "model." Either through the employment of staff or the use of consultants, they will concern themselves with alternative risk-sharing arrangements; the advantages of for-profit, versus not-for-profit, tax status; the development of a practical ambulatory care review system, and so on. Each IPA/HMO ultimately will require a management information system, a public relations program, a marketing strategy. Much of the time and effort that goes into the initial planning and development of each of these IPA/HMOs will be duplicative and costly.

At this writing, there are eight such physician groups engaged in IPAs at various levels of planning, including CoMed, which expects to be operational within the year. Two IPA/HMOs are actually delivering care—the Southshore Health Plan and Crossroads. (See Map 2) Partially as a result of the geographic dispersity among these various groups and the fact that more than half of them only became involved in this activity within the last six months, there has been little or no interaction among them. Furthermore, no forum exists in this State where newly emerging groups can meet or exchange information and share resources.

Another significant problem affecting the growth and development of IPA/HMOs in New Jersey is the cost involved in planning and implementing this type of delivery system. As was discussed in the Introduction to this Proposal, the IPA itself is an organization of physicians already engaged in the delivery of medical care in their respective communities. Unlike a group practice organization, physicians can be incorporated into an IPA with a minimum amount of cost and technical expertise.

Education is the principal ingredient required at this stage of planning.

The cost of developing an HMO to administer the program, on the other hand, can range from $600,000 to $1,000,000 and may require two or more years of planning before becoming operational. Government financing is often the only source of funding available and such grants are limited and difficult to obtain. Recruiting trained and experienced staff, in a highly competitive market, is also very difficult for the emerging IPA/HMO group. It is no wonder, therefore, that many physicians have become discouraged at the prospect of such an undertaking. More and more physician groups are turning to their county medical societies and the NJFHCE for assistance and guidance.

Finally, representatives of the business community have begun to express their desire to become more closely involved in the planning of health care delivery systems. People in business have traditionally been concerned with limited aspects of the health care system, e.g. hospital trusteeships. However, as private industry assumes a larger portion of the financial cost of underwriting health care benefits to their employees, they also have begun to seek ways of influencing that delivery system. The medical profession welcomes their interest and also would like to expand the role to be played by representatives of the business community and labor. Their management skills and organizational expertise are appropriate to the planning and development effort to be undertaken in this project.

V. Project Objectives—The major objectives of the IPA Consortium are as follows:

1. *To identify immediate areas of cost savings for existing IPA/HMOs in the State of New Jersey.* The project will analyze the advantages of shared management systems, joint marketing strategies, and other administrative operations.

2. *To explore methods of reducing the overall cost and time involved in planning and developing IPA/HMOs in the State of New Jersey.* The project will address itself to the feasibility of establishing a Statewide, federally qualified HMO which would eliminate the need to duplicate individual planning efforts.

3. *To increase the number of physicians involved in IPA/HMOs.* The project will develop an educational program aimed at interested physician groups in order to create the potential for a Statewide network of participating physicians.

VI. Methods—In order to achieve the objectives outlined above, this project will undertake three major endeavors:

1. **Education**—The project will expand and supplement the educational programs currently undertaken by the NJFHCE's IPA Resource Center. In addition to assisting in organizing seminars and presentations, an IPA/HMO model will be developed. The purpose of the model is to demonstrate to physician groups the relationship of these organizations and the processes employed to influence health care delivery. Each of the model's components—risk-sharing mechanism, for example—will provide the physician group with a basis for determining and/or evaluating contractual arrangements in their local IPA/HMO. The development of this model will require the input of professional expertise in various disciplines, including: HMO management, finance, law, marketing, and so on. The availability of this model, however, is expected substantially to expedite the planning process currently required to implement such programs.

The educational activities planned for this project will be directed primarily at physician groups in order to provide them with the best information available, to enable them to participate more actively in IPA/HMOs. However, the project also will focus on the public and private sectors interested in prepaid health care in the State of New Jersey. A public relations program will be planned to stimulate consumer knowledge of the IPA model. Furthermore, business leadership will be invited to participate in various tasks involved in formulating the design of this model and insuring its availability.

2. **IPA Consortium Forum**—A voluntary organization of all IPAs in the State of New Jersey—including operational, developing, planning and newly emerging groups—will be created. The IPA Forum would provide these physician groups, which are geographically dispersed, as well as at various levels of development, with a means of exchanging information and identifying areas of mutual interest.

A core staff of experts and consultants will be made available to the member groups and will provide the necessary technical assistance required to analyze and recommend alternative approaches to some of the problems identified. The primary focus of this organization will be those areas in which further cost savings may be realized, or rendered more efficient, through the use of shared resources and personnel. Among the areas to be addressed are the development of shared data systems, marketing activities, grant applications, quality assurance programs, and others. Member groups will contribute to the cost of maintaining these staff services through a per capita assessment. The composition and functioning of this organization will be determined by the members themselves.

3. **Statewide HMO**—The project will reassess the feasibility and advisability of developing a Statewide HMO under the aegis of the Medical Society of New Jersey. A select committee composed of physicians, health care administrators, representatives of private industry and employee groups, public officials and others will be organized to act as an advisory group. A staff composed of managerial, legal and fiscal experts will be employed to examine the critical issues affecting a Statewide HMO, including:

a. The *legal and legislative climate* for a physician-sponsored Health Maintenance Organization in the State of New Jersey, including federal qualification, will be examined.

b. A Statewide survey of *consumer and employer interest* in the IPA/HMO will be undertaken. Among the key issues to be considered in this study are the size of interested employer groups; costs and benefits of competing health care plans; receptivity of State and federal groups; a description of the Medicare and Medicaid market; and others. The study will also attempt to develop enrollment objectives, as well as identify a timetable for achieving desired levels of market penetration among each of these groups.

c. Each county medical society will be requested to conduct two separate *physician surveys.* A questionnaire will be prepared which will measure four levels of physician awareness regarding IPA/HMO:

- No knowledge regarding the organization, operation and objectives of IPA/HMOs.
- Desire to obtain additional information regarding IPA/HMOs.
- Willingness to become involved in an IPA/HMO.
- Commitment to participate in an IPA/HMO.

A second survey will be performed six months after the initiation of an intensive educational program throughout the State in collaboration with NJFHCE. (See Section V, Item 1).

d. A reexamination of the attitudes and disposition of *acute care hospitals* located throughout the State will be initiated. A study of hospitals in New Jersey was performed by the American Health Management and Consulting Corporation in 1976-1977 as part of an HMO feasibility report prepared for NJFHCE. The proposed project will address itself to the need to inform institutions regarding the goals and objectives of a Statewide IPA/HMO, as well as to assess their interest in participating in the program. Alternative contract arrangements and risk-sharing mechanisms will be explored and evaluated.

e. The current level of activity by major *third-party insurers* in the area of prepaid health care delivery will be determined. Each of the programs currently under development will be evaluated, including the Blue Cross option known as Medigroup, Inc. Areas of cooperation and/or mutual interest will be identified and recommendations presented to the advisory committee.

VII. Milestone Chart and Evaluation Plan—In order to measure the impact of this project on the stated goals and objectives outlined in this proposal, the following schedule for task completion and evaluation has been recommended:

Task	Time Frame Required
1. Determine the level of physician interest to participate in an Individual Practice Association, based on results of individual surveys conducted through the county medical societies.	10 months
2. Estimate time and cost reductions accomplished through the use of shared staff and resources involved in assisting emerging groups to complete IPA feasibility studies.	6 months-1 year
3. Develop IPA/HMO model	6 months-1 year
a. Identify corporate structure	
b. Develop benefits package	
c. Develop out-of-area, emergency arrangements	
d. Determine premium costs	
e. Develop risk-sharing arrangements	
f. Identify management systems requirements	
g. Identify quality assurance mechanisms	
h. Determine marketing strategy	
i. Determine enrollment objectives	
4. Identify interested employer and labor groups. Organize representatives in an Advisory Committee.	6 months-1 year
5. Evaluate feasibility of Statewide HMO. Recommend appropriate action to MSNJ related to the above determination.	6 months
6. Estimate levels of market penetration based on pre-marketing surveys of private industry in the State of New Jersey.	6 months-1 year
7. Summarize the impact of IPA/HMOs on the cost and quality of medical care provided in the State of New Jersey.	1 year-20 months

VIII. IPA Consortium Estimated Budget

Position	FTE[1]	Est. Annual Salary	Projected Cost
Project Director	1.00	$28,000	$28,000
Medical Advisor	.30	60,000	20,000
Legal Advisor	.30	30,000	10,000
Business Manager/Fiscal Advisor	.50	30,000	15,000
Marketing Manager	.30	33,000	11,000
Admin. Assistant	1.00	15,000	15,000
Total			$99,000
Consulting Fees			15,000
Fringe Benefits (15%)			15,000
OTPS[2] (20%)			23,000
Total			$152,000

Sources of Funding	Estimated Contribution
Medical Society	$50,000
Assessment IPA Consortium	10,000
Grants and Private Contributions	92,000
Total	$152,000

[1]Full Time Equivalents

[2]Other Than Personnel Salaries

Attachment #3

A. Proposed Budget: FY June 1, 1980 – May 31, 1981

Administrative Salaries	$114,718.32
Taxes	5,425.00
Fringe Benefits	13,350.00
O.T.P.S. (Overhead)	47,850.00
TOTAL	$181,343.32

B. Increased Budget: FY June 1, 1980 – May 31, 1981
(Assumes Implementation of Recommendation 5.)

Administrative Salaries	$139,718.32
Taxes	6,607.10
Fringe Benefits	16,258.98
O.T.P.S. (Overhead)	58,276.50
TOTAL	$220,860.90

C. Alternate Sources of Funding
1. Direct Assessment (MSNJ/NJAOPS)
2. Federal Grant
3. Private Funding
4. Other

Attachment #4

A Quality Assurance Strategy for Health Maintenance Organizations

(Issued by DHEW, Public Health Service, Office of HMOs—9/1/79)

I. INTRODUCTION

The HMO Act of 1973, as amended, is designed to foster the widespread growth and development of Health Maintenance Organizations. It gives the Secretary authority to disperse grants and loans, and to provide access to services through implementation of the "dual choice" option. Because the law authorizes a substantial investment on the part of the Federal Government, a quid pro quo was established requiring the regulation of HMOs which avail themselves of the benefits of the law.

Section 1301(c) of the HMO law, when viewed in the context of the requirements for qualification and continued compliance, provides broad authorities for establishing quality assurance program requirements and for monitoring the HMO's activities. Parts 8 and 11 of Section 1301(c) are particularly relevant. Section 8 requires that each "qualified HMO" . . .

". . . have organizational arrangements, established in accordance with regulations of the Secretary, for an ongoing quality assurance program for its health services which program (a) stresses health outcomes, and (b) provides review by physicians and other health professionals of the process followed in the provision of health services;"

Section 11 requires that each HMO report statistics and other information related to the availability, accessibility and acceptability of its services.

The purpose of this paper is to delineate an overall quality assurance strategy for HMOs consistent with these requirements of the HMO Act. The two main components of the strategy will be discussed. These are:

1. An internal program for assuring the quality of care. This will be managed by the HMO. (Internal Quality Assurance Program)

2. An independent assessment of the organization and operation of the internal quality assurance program in individual HMOs, the effectiveness of the program in identifying and correcting potential problems in the quality of care, and on a for-cause basis, when there is reason to believe that serious problems exist, an assessment of the quality of care. This review will be conducted by an entity not associated with the HMO. (External Assessment)

II. PLANNING ASSUMPTIONS

In order to develop a workable quality assurance strategy, it was necessary to address several important issues. These are:

1. HMOs are impacted by several quality assurance requirements. The strategy is designed to be compatible with existing hospital quality assurance activities and federal requirements under the PSRO, Medicare and Medicaid programs. Thus, HMOs will be able to coordinate their quality assurance activities with these other requirements to avoid unnecessary duplication of effort and still meet HMO program requirements.

2. Factors affecting the outcome of care often transcend the health care delivery system and relate to environment, patient responsibility and the natural course of disease. Also, the current state of medical science is such that professionally and scientifically accepted medical practices may subsequently be shown to have no effect on outcome or an adverse effect on patient outcome.

Moreover, the myriad of significant separate elements that comprise patient care preclude simple quantification for quality. Because of this situation we have decided to develop a program which focuses on potential problems in the quality of care, as defined by the local environment, in lieu of routinely collecting large quantities of uniformly formatted data and quantifying quality.

3. Traditionally federal legislation dealing with quality assurance has vested substantial responsibility with the private sector because: (a) most of the medical expertise is in the private sector; (b) there is a clear understanding that behavioral change cannot be mandated by Washington, and (c) if standards or criteria are to be an effective tool in improvement of care, they must reflect the environment at the local level.

These basic factors also apply with respect to HMO quality assurance. The policy which we have developed therefore delegates the major share of responsibility to the private sector.

4. After a review of the literature, it has become apparent that the state of the art of internal quality assurance in ambulatory care is diffuse in concept and application. In the past, most quality care review programs applied to the ambulatory setting have been hindered by the diversity of practice settings, problems and diagnoses; lack of clear definition of an episode of illness; lack of control over and documentation of patient compliance behavior; and marked variability in the content and format of medical records dependent on practice setting, specialities addressed, and so on.

Given these facts, we have come to the conclusion that it would be inadvisable

to require that HMOs adapt a single, rigid system. Nevertheless, we feel that it is reasonable to require that each HMO implement a quality assurance system within broad guidelines established by HEW. This would require that each HMO demonstrate, consistent with the objectives of the law, that there is an ongoing quality assurance activity which identifies potential problems, examines them, and assures that something is done about problems that actually exist. This would allow for a wide variety of established and innovative approaches.

5. Relative quality with the fee-for-service sector, or relative quality among HMOs should not be measured. These are research questions which are not addressed in this document.

6. The quality assurance strategy addressed in this paper is not designed to address problems of fraud and abuse. These will be handled by new policies to be issued shortly—dealing with full disclosure, third party involvement and selfdealing.

7. Qualification and compliance requirements of an HMO should be consistent. The strategy establishes a minimum standard for a program for assuring quality of care which an HMO must maintain as a prerequisite for meeting qualification requirements and remaining in compliance with federal requirements.

III. IMPLEMENTATION ASSUMPTIONS

HMOs are currently at varying stages in implementing internal quality assurance programs. Developing HMOs concentrate their early efforts on designing their health service delivery system and recruiting providers and members. Only after the HMO is operational and delivering health care service is the task of assuring the quality of these services addressed in detail.

Implementation of acceptable internal quality assurance programs in HMOs will be a huge job. It can only be accomplished if OHMO and the HMO industry work together to achieve the same goal. Initial efforts at implementation will be mainly training and technical assistance oriented. It will involve development of technical assistance materials and onsite intensive one-on-one consultation in many plans and training seminars. During this time, work will continue on defining the organization and operation of the external assessment component. While many longstanding HMOs have internal quality assurance programs firmly in place and probably will have external assessments early on, recently qualified and preoperational HMOs may require technical assistance and 12 to 18 months of experience prior to an external assessment.

IV. INTERNAL QUALITY ASSURANCE PROGRAM

Each HMO will be required to have acceptable organizational arrangements and program for assessing and improving the quality of care. This internal quality assurance program must be supervised by a physician in the HMO and involve a broad spectrum of health professionals in the HMO. While outside technical assistance may be utilized for establishing and implementing the program, the actual responsibility for review cannot be delegated to an outside party.[a]

Traditionally, successful HMOs have had in place various quality control activities which directly or indirectly impact on the quality of care provided. These activities include personnel selection and evaluation procedures, laboratory controls, utilization review procedures, physician productivity, and member attitude surveys. Depending on the organizational structure and management of the HMO, these activities may be identified as part of an overall quality assurance program or may be administered separately by the medical director, executive director, finance director or marketing director. Apart from these activities HMOs will be required to have an internal quality assurance program which encompasses a systematic and documented approach to reviewing the quality of care. It should be ongoing, quality-improvement oriented and be flexible enough to accommodate potential problems in both the inpatient and outpatient settings. A program based on medical care evaluation studies (MCEs) possesses these attributes. MCEs is the name given to a generic form of health care review in which problems in the quality of the delivery and the organization of health care services are addressed and monitored. The objectives of MCEs are achieved through assuring that:

1. health care services are appropriate to the patient's needs and are of acceptable quality, and
2. health care organization and administration support the timely provision of quality care.

By systematically and objectively examining suspected problems and documenting patterns of health care related to these potential problems, MCEs should be capable of identifying deficiencies in the quality of care so that where they exist specific improvements may be directed at the causes of the deficiencies. Since there are a variety of methods for conducting MCEs and since study data may be collected concurrently or retrospectively from a variety of already existing data sources (including patient charts, encounter forms, appointment or laboratory logs, and claims forms), with the analysis of the data performed retrospectively, the MCE process is flexible enough to accommodate inpatient and ambulatory problems and the variety of HMO models. Additionally, an internal quality assurance program based on MCEs can be integrated easily with the HMOs other quality control activities. Potential problems identified through utilization reviews or member surveys can be fed into the MCE process for further documentation and action, if necessary. The eventual outcome will be a total program of quality assurance in the HMOs with each component supporting the others to continually improve the quality of care.

MCE studies are not clinical trials or clinical research. Their purpose is to evaluate current local health care practices to determine if they meet current acceptable professional practices. A successful MCE study does not set out to expand medical knowledge, although expansion of knowledge may well be a byproduct of the study. Rather, the primary goal of the MCE process is to cause improvement in care by assuring that generally accepted or proven measures are being utilized by health care providers given the local resources available.

Effective MCE studies may be implemented using a wide variety of procedures and methods. However, each study should be designed with specific objectives and address known or suspected problems, so that they have the potential for improving quality of care. An MCE has the following basic characteristics:

1. It focuses upon a known or suspected problem area impacting on the quality of health care and relevant to the needs and concerns of the organization, its staff and patients;
2. It focuses on a well-defined topic and is carried out in accord with objectives explicitly stated in, and specifically developed for the study;
3. It utilizes written criteria against

[a]This does not preclude such arrangements with physicians who are providing services under contract with the HMO.

which actual reviews of performance are compared;
4. It provides for collection of data on a sample of patients the size and composition of which is appropriate to the study topic and objectives. The MCE study identifies patterns of care related to the subject under study and is not in general concerned with individual patients. Therefore, the sample is drawn from all members in the HMO appropriate to the topic selected. (Of course, significant individual patient problems identified during the course of an MCE should be followed up.)
5. It provides for thorough peer analysis of the reasons for any discrepancies between the written criteria and the data collected on actual health care practices to determine whether variations are objectively justifiable or represent problems that require corrective action;
6. It results in specific recommendations, where indicated, to individuals, boards or committees who are responsible for assuring the quality of care in the organization, and to those who are responsible for effecting changes in health care practices, either through appropriate continuing health education activities, through changes in the organization and administration of health care delivery, or through other means appropriate to the deficiencies identified by the study, in order to improve the quality of care and promote more effective and efficient utilization of facilities and services;
7. It includes evidence that recommended actions were, in fact, adequately addressed or implemented;
8. It includes a plan for followup evaluation, where indicated, to determine what changes have occurred as a result of actions recommended pursuant to item (6) to correct specific deficiencies identified by the study;
9. It provides for such followup evaluation, where indicated, to be completed in a reasonable time, but usually no later than one year following the performance of the initial study.
10. It provides for periodic reporting of at least a summary of the quality assurance activities to the governing board of the organization to assist the board in meeting its public responsibility to assure the provision of quality care in the organization. If results of a study require specific board action, appropriate results of the particular study must be reported to the board.

These basic characteristics are modeled after the Medical Care Evaluation (MCE) program of PSRO, and as such, (1) provide HMOs with a consistent set of quality review requirements for all members regardless of who pays the premium; (2) represent a *generic* approach to systematic identification of problems in medical care delivery and subsequent solving of these problems; (3) have as their major objective the correction of deficiencies which impact on patient care, through administrative and system changes, peer pressure, education, and as a last resort, sanctions; (4) are an ongoing, integral part of the HMO health care delivery system, and therefore, financed as an internal operating expense; (5) are comprehensive both in terms of health professional involvement and topic selection.

The HMOs quality assurance program should not be limited in scope to the study of physician-related health care, but should address the health care provided by a variety of professionals in the organization. Additionally, topics should be selected in any area where problems are suspected, including clinical and administrative problems which affect patient care, as well as problems of under or overutilization of services. However, exclusive concentration on administrative problems will not fulfill the requirements.

The appropriateness of the problems addressed by any HMO will depend, in part, on the size and characteristics of the membership, the providers, and the type of HMO. HMOs differ from the traditional health care delivery setting in that care is comprehensive and there is the potential to collect data and track patients across several levels of care. Thus, problem identification and topic selection for MCEs should take advantage of these characteristics. Data sources which may already be in place, such as population statistics, billing and encounter forms, staff meeting minutes, utilization profiles by department, and service for ambulatory and hospitalized patients (including laboratory and X-ray services) may be useful. Problems identified for study should be relevant to patient well-being. Priorities might be set on the basis of:
1. The importance of an error in contributing to poor quality or wasteful practices;
2. The frequency of the problem;
3. The degree to which the problem can be studied; and
4. The degree to which the problem may be improved through corrective measures.

Examples of the subjects for MCEs may include, but are not limited to the following types of problems:
1. Inadequate immunization levels in children;
2. Poor prenatal visit compliance;
3. Inadequate or untimely followup on abnormal laboratory results;
4. Lack of followup on "no-show" patients with treatable disorders;
5. Poor drug prescribing practices;
6. Inadequate or excessive referral patterns;
7. Inadequate or excessive hospital utilization;
8. Poor patient compliance (e.g., use of medication);
9. Low member satisfaction;
10. Avoidable adverse drug reactions.

The HMOs internal quality assurance activities must be conducted in an ongoing manner. For the most part, each MCE should be of short duration to permit timely impact on the health care system. The responsibility for this activity must rest with a discreet committee within the organization with clearly defined lines of communication to those responsible for implementing changes. MCEs conducted by subunits within the organization, such as individual services, specialities, or professions, conducted in response to patient concerns, are consistent with the overall internal quality assurance program. Additionally, there should be evidence that the professional and management staff understands, supports, and participates in the internal quality assurance program.

Numerical requirements for MCEs have not been set. The acceptability of the internal quality assurance program, as measured by the quality of the MCE activity, will be determined primarily by the importance and relevance of the issues addressed (topics selected for study) and the degree of effort toward improvement in care. It is expected that each HMO will implement a program which systematically examines all major areas of care (pediatrics, internal medicine, ob/gyn, surgery at a minimum) in order to identify potential problems, then prioritize the problems for study and corrective action. It is expected that other less frequently used services will also be examined. In judging the adequacy of the HMOs magnitude of effort, the scope of the problem identification process and how significant problems were dealt with will be evaluated.

V. EXTERNAL ASSESSMENTS

The external assessment is designed to assess the ongoing capability of an HMO to assure quality care as a prere-

quisite to maintaining compliance with the HMO Act and regulations.

The scope of the external assessment will include examination of:

1. the organization and operation of the internal quality assurance program including the effectiveness of the program in identifying problems in the quality of care and addressing them;
2. information relating to the availability, accessibility and acceptability of care as measured by the HMO; and
3. the quality of care, on a for-cause basis, if there is reasonable evidence that serious problems exist. This aspect of the external assessment would not be performed routinely.

The responsibility for these external assessments would be delegated to a private organization. The majority of the governing body of the organization would be composed of physician representatives of the HMO industry with a meaningful number of public members. This organization will be funded by OHMO and will necessarily have to operate within broad guidelines established by the Federal Government with their performance monitored by OHMO. External assessments will be peer based. Standards for the external assessments, including the parameters for a cause review, would be jointly set by the oustide organization and OHMO. Every attempt will be made to coordinate these assessment activities with those of individual states, where they exist, to avoid undue burden on the HMO.

The external assessments might take place in five stages:

1. A presurvey questionnaire would be sent to the HMO by the outside organization.
2. The questionnaire would be evaluated along with utilization data, complaint files and other similar information available from OHMO, and a strategy for the onsite survey developed taking into consideration that organizations differ in many respects, such as size, structure, goals, purposes, and services offered. A survey team would be chosen, matching the characteristics of the HMO to the expertise of the surveyors, and a date for the survey established with the HMO.
3. The private review body would conduct an onsite evaluation of the HMO, using knowledgeable administrative and medical professionals specifically trained for the survey activity. The organization, operation and effectiveness of the internal quality assurance program would be examined. Additional areas would be the type and extent of services provided including information on availability, accessibility, and acceptability of services and the ability of the HMO to meet the criteria it established in the approved qualification application, and subsequent amendments.
4. If there is reasonable evidence that serious problems exist, the private review body would conduct an indepth review of the provisions of services related to the suspected problem. This aspect of the external assessment would only be performed on a for-cause basis, and not routinely. The HMO would be notified prior to the initiation of a for-cause review.
5. At the end of the survey visit, team members would conduct a summation conference with representatives of the HMO to inform them of the findings. The team would then submit a report to the Office of Health Maintenance Organizations.
6. The OHMO would review the site visit report. These reports would be the principal basis for OHMO action. This action could range from formal notification to the HMO of a positive report, to requests for followup reports, resurvey or notification of noncompliance.

The external assessment would be conducted every three years in most cases, but could be done on a for-cause basis when serious problems have been brought to the attention of the HMO office. Due to the diversity of HMO arrangements the external assessments must be flexible enough to accommodate all forms of HMOs.

VI. HMO-PSRO RELATIONSHIP

Under the HMO regulations the HMO quality assurance program must be designed in a manner which would allow an HMO to meet the criteria for delegation of PSRO review functions. Also, PSROs are required, by statute, to delegate review functions to hospitals and other medical care organizations, such as HMOs, requesting delegation and found capable of performing effective review. As noted above, the strategy for HMO quality assurance is compatible with PSRO requirements in that it fulfills a portion of the review requirements for which PSROs are responsible.

PSROs are required to review the health care services provided to federally-funded patients (Medicare and Medicaid) to assure medical necessity, appropriateness and quality of care. The review techniques commonly utilized by PSROs include a concurrent review process, the analysis of patterns of practice (profiles) based on episodes of care, and MCE studies. PSROs also may use other review techniques to achieve their objectives. Most PSROs are primarily involved in review in hospital settings. Ambulatory care review is optional for PSROs. Consequently, the majority of PSROs would not review the entire spectrum of care provided by HMOs to federally-funded patients.

The HMO quality assurance strategy includes the equivalent of the MCE study component of PSRO review. However, HMOs are likely to conduct these studies across both the institutional and ambulatory levels of care. HMOs also conduct utilization review for their hospitalized patients, similar to PSRO concurrent review.

For an HMO to be eligible for delegation of PSRO review for its Medicare and Medicaid members, the HMO would be required to implement a review system which the PSRO found effective. PSROs currently delegate concurrent review and MCE study functions to hospitals, including hospitals owned by HMOs. HMOs may also request delegation of PSRO review for federally-funded HMO members receiving health care in institutions which are not owned by the HMO. In either case, the HMO must have a review plan acceptable to the PSRO and must use PSRO norms and criteria for the federal patients unless specific waivers are granted.

On the converse, as previously stated, an HMO may not delegate its quality assurance activity to the PSRO, as this is part of an HMO's internal operating responsibility.

Comparison of Selected Characteristics of Operating IPAs in New Jersey*

	CoMED IPA CoMED HMO	ECHO IPA Crossroads HMO	Atlantic Cape IPA Southshore HMO	SIMA IPA Blue-Cross-Blue Shield
1. Name				
2. Tax Status	For-Profit	Not-For-Profit	For-Profit	For-Profit
3. No. Physicians				
a. Participating	310	925	130	70
b. Shareholders	350		87	
4. IPA Fee				
a. Current	$75	$15	$500	
b. Initial	$50	$15	$500	$250
5. Capitation Rate**	$18.92	$16.59	$9–$10 [1]	$16.00
6. % Fee Withheld	15	15	20	20 [2]
7. Distribution of Escrow Account	IPA decides at end of FY	IPA Distributes proportionately at end of FY	Funds are held in a single account with HMO funds for other services (See #8).	IPA/HMO jointly decide. Priority are physicians who rec'd less than 80% of fees.
8. Risk Sharing Agreement	Max. risk for phys. services is 15% withhold. HMO assumes risk for IP services. Surplus funds from reduced IP services shared; 1/3 IPA, 1/3 Hosp., 1/3 Sub.	Max. risk for phys. services is 15% withhold. HMO assumes risk for IP services. Surplus funds [3] from reduced IP services to be shared with IPA.	Min. risk is 20% withhold; IPA assumes full risk for all phys. services, except lab. In addition, the fee withhold and any excess capitation is at max. risk of 25% for IP, Lab and ER services. If a surplus exists at the end of FY, IPA distributes fee withhold, excess capitation, plus a bonus from other accounts (IP, Lab and ER)	Min. risk for phys. services 20% withhold; IPA assumes full risk for all physicians services. Potentially at risk for IP services as well. Surplus funds from reduced IP services and retained by Blue Cross.
9. Board Composition				
a. HMO	a. 1/3 IPA phys. 1/3 Hospital 1/3 Plan Members	a. 51% IPA Phys. 49% Hospital Subscriber Employer, etc.	a. 1/3 IPA Phys. 1/3 Subscriber 1/3 Other Provider	a. Blue Cross/Blue Shield
b. IPA	b. 100% IPA Phys.	b. 100% IPA Phys.	b. 100% IPA Phys.	b. 100% IPA Phys.
10. Contract with other HMOs	Yes, possible	Yes, possible	Yes, possible	Yes, possible
11. IPA Med. Dir.	Yes	Yes	No	Yes
FT vs PT	FT	PT	–	PT
Salaried	Yes	Yes	–	Expenses only [4]
12. Committee Reimbursement	Yes, with IPA approval & within the guidelines est'd by IPA/HMO.	Under Negotiation	No	Not at this time
13. Phys. Contract Cancellation	With 60-days notice either party may cancel. Grievance procedure in contract.	With 90-days notice. Grievance procedure in contract.	With 90-days notice. Grievance procedure in contract.	With 30-days notice. Grievance procedure in contract.

revised 8/6/79

[1] Does not include laboratory services.

[2] May be increased at any time to protect the solvency of the Plan.

[3] After the first year of operation.

[4] Currently. Position is expected to be salaried in the future.

* SIMA expected to become operational in July, 1979

** Comparisons of capitation rates are difficult without reference to local fee schedules, as well as, a complete listing of services included.

We're not asking you for money.

Just a few words. To people who need us but don't know we exist.

We're Recording for the Blind. We're already helping more than 13,000 handicapped students. But there are a lot more out there who need our help.

You know who they are. In your work you come across students who are blind, dyslexic or physically unable to handle books. These are the students we help. Since they cannot read their textbooks, we do it for them. On tape. And we send the tapes to the students free of charge.

All we want you to do is tell eligible students about us. Have them contact: Student Services, RFB, Inc., 215 East 58th Street, N.Y., N.Y. 10022, (212) 751-0860. We'll take it from there.

It's such a little thing to ask.

Recording for the Blind is a non-profit organization. All contributions are tax-deductible.

Recording for the Blind, Inc.

an educational lifeline.

Report from the Foundation

Daniel J. O'Regan, M.D.
Medical Director

President Carter designated last month as "Older Americans Month," and May 8, 1980 was proclaimed: "Senior Citizens Day." In making these proclamations, the President noted that significant changes are taking place in our population. The decline in the birth rate, coupled with improvements in health care, are moving us toward a society in which an ever-higher proportion of Americans will be older. This trend, of course, poses a number of questions. One of the most important is how to target resources to meet the medical needs of the elderly.

The Star-Ledger of April 13, 1980 noted that New Jersey officials are proposing a $47 million bond issue to construct some 1800 nursing home beds. By the year 2000, there are expected to be nearly 1,200,000 persons over 65 living in our State. There are about 750,000 in this age group at present. The State already has approved construction of 5,000 nursing home beds by private developers. However, the shortage of bank loans has prevented actual building of these beds, which are referred to as: "being in the pipeline." Human Services Commissioner Ann Klein said that the severe shortage of nursing home beds has reached the critical point. Deputy Commissioner Gerald Reilly added that there is a desperate need for more beds for the elderly. At any given time, about 3,000 individuals are awaiting transfer to nursing home beds.

These announcements, of course, are not news to any practicing physician. They are important for a number of reasons, not the least of which is the impact of the situation on PSRO performance, particularly in utilization review. A survey conducted by your Foundation last Fall revealed that 1,018 patients were awaiting transfer to a long-term care facility. These persons were occupying beds in acute care hospitals, because other levels of appropriate care (nursing homes, home health agencies, and others) were unavailable. In June of last year, the New Jersey Supreme Court ruled that the State must reimburse hospitals for care provided to Medicaid patients while they are awaiting placement in a nursing home. The Court recognized the critical shortage of nursing home beds, and said that the State was responsible. This decision resulted from a suit involving the Monmouth Medical Center. Medicaid is developing rules to conform with the orders of the Court. PSROs probably will be involved in the monitoring process. The hospital must be genuinely seeking to place the patient in an alternate facility.

PSROs in the Northeast are particularly concerned with this situation. Our neighbor states report similar conditions. These conditions are beyond PSRO control, and PSRO statistics often reflect this. The New Jersey Professional Standards Review Council has addressed itself to this problem. A report was developed by a committee of the Council. Since the medical needs of the elderly include all aspects of care, it quickly became apparent that a broad-based analysis would be needed. The initial report was referred by the Council to the New Jersey Foundation for Health Care Evaluation. NJFHCE's Committee on the Management of the Aged, under the leadership of William A. Dwyer, Jr., M.D., refined the document into a report on many aspects of management of the aged. At a meeting of the Committee on February 13, 1980, many of the parties involved in the care of the elderly were brought together, and a good deal of interest was generated.

This topic will be of major importance in New Jersey in the years ahead. Improvement in the efficiency of delivery of quality medical care at appropriate sites of delivery cannot make much progress without improvement in the availability of alternatives to the acute care hospital. This means more available ambulatory care as well as long-term levels. Utilization review will be hamstrung unless the patient—and the doctor—are able to find appropriate sites. If such alternatives remain in short supply, significant numbers of patients will remain in the hospital. Alternatives in financing, in insurance coverage, and in reimbursement levels must be found. Solutions are made more elusive by the effects of inflation, but the need remains.

This is an example of how the "real world" impacts on programs, regulations, and plans. It is also an example of the kinds of problems which the founders of NJFHCE foresaw. We do not pretend to have all the answers, but we believe that our ability to focus on issues of this kind, and to bring the parties together, is a useful service to our colleagues and their patients. It will be interesting to see the results of the DRG program on the elderly patients for whom alternative beds cannot be found. Changing the review or reimbursement systems will not produce long-term care beds, but something will have to "give."

CMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

With the joint approval of the State Legislature and the Board of Higher Education in hand, CMDNJ hopes to embark shortly on a combined medical education program and health delivery system that is unique in this country.

Involved will be the construction of a clinical training facility in South Jersey and expansion of facilities on the College's Piscataway campus in Central Jersey. Both projects, costing a total of $12 million, will be funded from the 1977 New Jersey Medical Education Facilities Bond Act which was approved overwhelmingly by the voters.

The South Jersey project, to be built in Camden, is designed to accommodate both osteopathic and allopathic medical students enrolled in the CMDNJ-New Jersey School of Osteopathic Medicine and the CMDNJ-South Jersey Medical Education Program. It includes the construction of a teaching and research facility for both teaching disciplines, as well as for offices for the osteopathic medical school, near the site of the proposed Veterans Administration Hospital. Also included will be the rental of space in the Cooper Medical Center complex to house faculty and staff of the allopathic program.

Much of the clinical component of the educational program for the third- and fourth-year medical students will take place in the two hospitals, although osteopathic students will receive a portion of their clinical training at John F. Kennedy Memorial Hospital, Stratford, which is the core teaching facility for the osteopathic school.

The proposed Piscataway expansion for the CMDNJ-Rutgers Medical School includes additional faculty office and research space, teaching laboratories, expansion of the vivarium and additional parking space. Other needs for the medical school, including a new lecture hall, are not part of the project and have been tabled for future consideration.

What helps to give the program its uniqueness is that the Piscataway expansion further will advance the College's joint basic science program for students of allopathic and osteopathic medicine, which already is unequalled in the United States.

In addition, the unified medical education facility in South Jersey will fulfill CMDNJ's commitment to Camden. Besides training our clinical

students, the facility will help to serve the health needs of an urban community and will develop into a stronger program for future growth and for attracting physicians and researchers in the area.

The Camden facility will represent but a part of a major health care education consortium which will provide health services and personnel to the medically underserved southern counties. Supplementing the education and service in all areas of the health professions will be the federally-funded Camden Area Health Education Center (AHEC), under the direction of the osteopathic school. Plans have been completed to open the first AHEC outpatient facility in Camden in the fall.

CMDNJ's goal is to assist in providing adequate health services for all segments of South Jersey, while assuring access for young New Jerseyans for careers in the health professions. We have begun to draw together a unique network of health resources and professional skills, and throughout the 1980's, we expect to see this consortium become operative in an attempt to alleviate some of the area's pressing health needs.

Camden's health situation can be compared with Newark in the late 1960's, when CMDNJ established its first campus. Comparable circumstances included a steadily decreasing ratio of physicians to population, infant mortality which was the highest in the state, and death rates from disease significantly higher than national averages. Camden's current infant death rate of 37 per thousand is nearly three times higher than the state rate, and statistics are almost as disturbing for cancer, heart disease, cerebrovascular disease and deaths due to accidents.

Establishing a medical school in Newark was the first step in what would become a dramatic change in the situation. We are confident that the same results can be achieved in Camden.

In correlation with providing adequate health services, both construction projects in the program are needed to accommodate the expansion of enrollments at the CMDNJ-New Jersey School of Osteopathic Medicine and CMDNJ-Rutgers Medical School. In South Jersey, a projected total of 208 students of CMDNJ will be pursuing clinical studies by the mid 1980's. Of these, 112 will be third- and fourth-year osteopathic students at the John F. Kennedy Memorial Hospital, and 96 will be allopathic students in two classes of CMDNJ-Rutgers Medical School at the Cooper Medical Center.

In Piscataway, the CMDNJ-Rutgers Medical School building originally was designed to accommodate 160 medical students and 75 faculty members. Since the osteopathic school will continue to offer basic science education at this facility, in keeping with the April, 1979 decision of the Board of Higher Education, it is projected that by 1985 the Piscataway building will house 310 students and 115 faculty members.

Tonometry Training Film

"Prevent Blindness with Schiotz Tonometry," a 16 mm., seven-minute, sound, color film for professional audiences, which describes how to perform Schiotz tonometry, is available for loan from the Medical Society of New Jersey through the Committee on Conservation of Vision. The film originally was sponsored by the Texas Society to Prevent Blindness to encourage non-ophthalmologists to include checking for glaucoma as part of their physical examination. Requests for loan of the film should be directed to Mr. Joseph C. Lucci, Director of Medical and Insurance Affairs, MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

American College of Cardiology Fellows

The following members of the Medical Society of New Jersey have received Fellowship in the American College of Cardiology:

Shaukat A. Chaudhery, M.B., Parlin
Irvin D. Goldfarb, M.D., Newark
Julius A. Gutman, M.D., Glen Ridge
Basva P. Kunamneni, M.D., Clifton
Ira H. Pores, M.D., Millburn
Howard C. Rothman, M.D., Fort Lee
Denis S. Schisano, M.D., Beverly Heights
Harlan J. Sicherman, M.D., New Brunswick
William A. Tansey, III, M.D., Short Hills
Vijay K. Thamman, M.D., Lodi
Pranaychandra J. Vaidya, M.B., New Milford
Stephen E. Weinberg, M.D., Cherry Hill

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Office of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Mohammed Mushtaque, M.D., 183-11 Hillside Ave., Apt. 11-K, Jamaica, NY 11432. Dow (Pakistan) 1975. Board eligible. Group, solo, or institutional. Available July 1980.

Narciso J. Samuy, M.D., 1180 East and West Road West, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Group or partnership. Available July 1980.

DERMATOLOGY—Ellen Blank, M.D., 1675 York Avenue, New York, NY 10028. Mt. Sinai 1975. Board certified. Any type practice. Available.

Karen Kade, M.D., 38 Fidelity Court, Carrboro, NC 27510. Albert Einstein 1976. Board eligible. Multi-specialty group. Available August 1980.

FAMILY PRACTICE—Kuchibhotla M. Krishna, M.D., 4309 West 95th Street, Apt. #23, Oaklawn, IL 60453. Andhra (India) 1970. Clinic practice or hospital-based practice without calls or weekends. Available January 1981.

GASTROENTEROLOGY—Michael F. Fina, M.D., 134 North Street, Apt. 7, Newtonville, MA 02160. New York Medical College 1975. Also, general internal medicine. Board certified (IM). Group, partnership, solo. Available July 1980.

Abbasi Akhtar, M.D., 333 East Ontario Street, Apt. 1512-B Chicago, IL 60611. Liaquat (Pakistan) 1966. Also, general internal medicine and pediatric gastroenterology. Board eligible. Any type practice. Available September 1980.

GENERAL PRACTICE—Gregory A. Pistone, M.D., 2018 High Street, Haddon Heights 08035. Pennsylvania State 1979. Board eligible. Student health/adolescent medicine, pharmaceutical, ER, house physician. Available July 1980.

James Walter Warren, M.D., 67 Welton Street, New Brunswick, NJ 08901. Meharry 1973. Also general internal medicine. Any type practice. Available.

HEMATOLOGY/ONCOLOGY—P.S. Bala, M.D., 882-6 Clifton Court Circle, NE, Atlanta, GA 30329. Calicut (India) 1965. Board eligible. Any type practice. Available July 1980.

INTERNAL MEDICINE—Jay I. Lipoff, M.D., 3188 Skinner Mill Road, Apt. 9-G, Augusta, GA 30909. NYU 1975. Also, cardiovascular diseases. Board certified. Group or partnership. Available July 1980.

Omprakash B. Ramani, M.D., 61-15 98th Street, Apt. 17-F, Rego Park, New York

11374. B. J. Medical (India) 1973. Board certified. Group or partnership. Available July 1980.

Stuart R. Schlanger, M.D., 105 North 31st Avenue, Omaha, NE 68131. Washington University 1977. Special interest, emergency medicine. Board eligible. Group or partnership. Available July 1980.

Richard Plotzker, M.D., 79 Holbrook Road, North Quincy, MA 02171. St. Louis University Board eligible. Group, clinic, institutional, or industrial. Available July 1980.

Khadar Baig, M.D., 2681 Arlington Drive, Apt. 303, Alexandria, VA 22306. Andhra (India) 1971. Subspecialty, gastroenterology. Board certified. Any type practice. Available July 1980.

Douglas R. Shumaker, M.D., 7861 Jefferson Street, Hummelstown, PA 17036. George Washington University 1977. Partnership, single or multi-specialty group, solo, emergency room. Available July 1980.

Joel M. Cohen, M.D., 1131 University Boulevard West, Apt. 1404, Silver Spring, MD 20902. SUNY-Downstate 1975. Subspecialty, cardiovascular diseases. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Sybil Kramer, M.D., 68 Winchester Street, Brookline, MA 02146. SUNY-Downstate 1975. Subspecialty, endocrinology. Board certified. Single or multi-specialty group, partnership. Available July 1980.

Mark L. Friedman, M.D., 2901 S. King, Apt. 1003, Chicago, IL 60616. University of Chicago 1977. Subspecialty, emergency medicine. Single or multi-specialty group, partnership. Available July 1980.

Richard L. Rudolph, M.D., 124 Pearl Street, Red Bank 07701. CMDNJ 1976. Board eligible. Single or multi-specialty group, partnership. Available.

Robert H. Gordon, M.D., 5500 Wissahickon Ave., Apt. 405-C, Philadelphia, PA 19144. Jefferson 1975. Subspecialty, rheumatology. Board certified. Any type practice. Available July 1980.

Lawrence P. Saladino, M.D., 3428-B Alpine Court, Lexington, KY 40502. Georgetown 1975. Subspecialty, emergency medicine. Institutional, multi-specialty group, emergency room. Available July 1980.

Laurence J. Clark, M.D., 5038 Cliffhaven Drive, Annandale, VA 22003. Georgetown 1975. Subspecialty, emergency medicine. Partnership, solo, emergency room. Available July 1980.

Devi P. Misra, M.D., 7K University Terrace, Columbia, MO 65201. SCB Medical College (India) 1967. Subspecialty, pulmonary medicine. Board certified. Solo, institutional, group. Available July 1980.

Jon Allen Kotler, M.D., c/o Dept. of Medicine, 1356 Lusitana Street, Honolulu, HI 96813. Emory 1976. Subspecialty, emergency medicine. Board eligible. Single or multi-specialty group, partnership. Available.

Howard L. Kramer, M.D., 4 Longfellow Place, Apt. 803, Boston, MA 02114. Florida 1975. Board certified. Single or multi-specialty group, partnership. Available.

Mirza M. Ashraf, M.D., West St. Road, Carthage, NY 13619. King Edward (Pakistan) 1967. Subspecialty, cardiovascular diseases. Solo, single-specialty group, institutional. Available.

Mohamed M. Haq, M.D., 10555 Fondren, Apt. 422, Houston, TX 77096. Osmania (India) 1973. Subspecialty, neoplastic diseases. Board certified. Single or multi-specialty group, research. Available July 1980.

Betty J. Barcevac, M.D., 2795 Shore Parkway, Apt. 1-G, Brooklyn, NY 11223. Guadalajara (Mexico) 1976. Group, partnership, single or multi-specialty group. Available July 1980.

Robert Lebow, M.D., 77 Grove Street, Montclair 07042. SUNY-Downstate 1977. Board eligible. Academic, partnership, multi-specialty group, industrial. Available July 1980.

Ira E. Kaplan, M.D., 523 East 14th Street, New York, NY 10009. SUNY-Downstate 1976. Special interest, cardiology. Board certified. Group, partnership. Available July 1980.

Hyung G. Kim, M.D., 1834 Beacon Street, Washington CH, OH 43160. Yonsei (Korea) 1970. Subspecialty, cardiology. Board certified. Group, partnership, or hospital-based practice. Available.

Akbar H. Obaray, M.D., 61-20 Grand Central Parkway, Apt. A-1407. Forest Hills, NY 11375. Grant (India) 1972. Subspecialty, pulmonary medicine. Board certified. Solo, group, or partnership. Available July 1980.

Bharat B. Parikh, M.D., 41-06 75th Street, Apt. 2, Elmhurst, NY 11373. Baroda (India) 1973. Subspecialty, pulmonary medicine. Board eligible. Solo or guaranteed group practice possibly leading to partnership. Available July 1980.

Fred Lewis, M.D., 7 Peter Cooper Road, Apt. 8-F, New York, NY 10010. Albany 1971. Subspecialty, endocrinology. Board certified (both). Group or hospital-based practice. Available.

Edward Lebowitz, M.D., P.O. Box 349, Lake Placid, NY 12946. SUNY-Downstate 1963. Board eligible. Group or partnership. Available.

NUCLEAR MEDICINE—Philip A. Bardfeld, M.D., 160 West End Avenue, Apt. 8-E, New York, NY 10023. SUNY-Downstate 1961. Board certified. Single or multi-specialty group, institution. Available.

OBSTETRICS/GYNECOLOGY—Lemuel G. Villaneuva, M.D., 173 Lionhead Court, Baltimore, MD 21237. University of East (Philippines) 1974. Board eligible. Solo, group, HMO associate, hospital-based. Available July 1980.

Mina M. Chudgar, M.D., 15427 Jester Avenue, Baton Rouge, LA 70816. B.J. Medical College (India) 1972. Board eligible. Group, partnership. Available July 1980.

Mohammad Imtiaz Ahmad, M.D., 677 Central Avenue, Barboursville, WV 25504. Pakistan 1970. Board eligible. Solo with coverage when needed, small town. Available.

ONCOLOGY—Kumud S. Tripathy, M.D., 14 Slate Creek Drive, #5, Cheektowaga, NY 14227. P.W. Medical (India) 1972. Also, general internal medicine. Board certified (IM). Solo, group, institution-based, or partnership. Available July 1980.

Pradeep S. Mahal, M.D., 12415 Newbrook Drive, Houston, TX 77072. All-India 1974. Also, general internal medicine. Board certified (IM). Solo, single or multi-specialty group, partnership. Available July 1980.

OPHTHALMOLOGY—Ronald A. Serniuk, M.D., 502 Thompson Avenue, Roselle, NJ 07203. Georgetown 1971. Board eligible. Partnership or solo. Available.

Mitchell Schuman, M.D., 1675 York Avenue, New York, NY 10018. New York Medical 1975. Board eligible. Any type practice. Available July 1980.

Edward A. Pulice, M.D., 49-20 Hanford Street, Apt. #1, Douglastown, NY 11362. NYU 1976. Group, partnership, solo. Available July 1980.

PATHOLOGY—Uma Raghavan, M.D., Dept. of Pathology, Norwalk Hospital, Norwalk, CT 06850. Delhi (India) 1973. Both AP/CP. Board certified. Group. Available.

Joseph V. Napolitano, M.D., 7 Howland Road, Middletown, NJ 07748. Bologna (Italy) 1972. Special interest, anatomic and clinical pathology. Board certified (both). Institutional, group, or partnership. Available.

PEDIATRICS—Norma P. Samuy, M.D., 1180 East and West Road, West Seneca, NY 14224. Santo Tomas (Philippines) 1970. Board eligible. Solo, partnership, clinic. Available July 1980.

Soni Mahesh, M.D., 100 Hospital Plaza, #811, Paterson 07503. Baroda (India) 1973. Board eligible. Partnership or solo. Available July 1980.

Nathaniel D. Wycliffe, M.D., 1563 Boston Avenue, Bridgeport, CT 06610. Dacca (Pakistan) 1972. Board certified. Group, solo, associate. Available July 1980.

PSYCHIATRY—Charles Goldfarb, M.D., 121 Deerhaven Road, Mahway 07430. Buffalo 1956. Board certified. Partnership in single or multi-specialty group. Available July 1980.

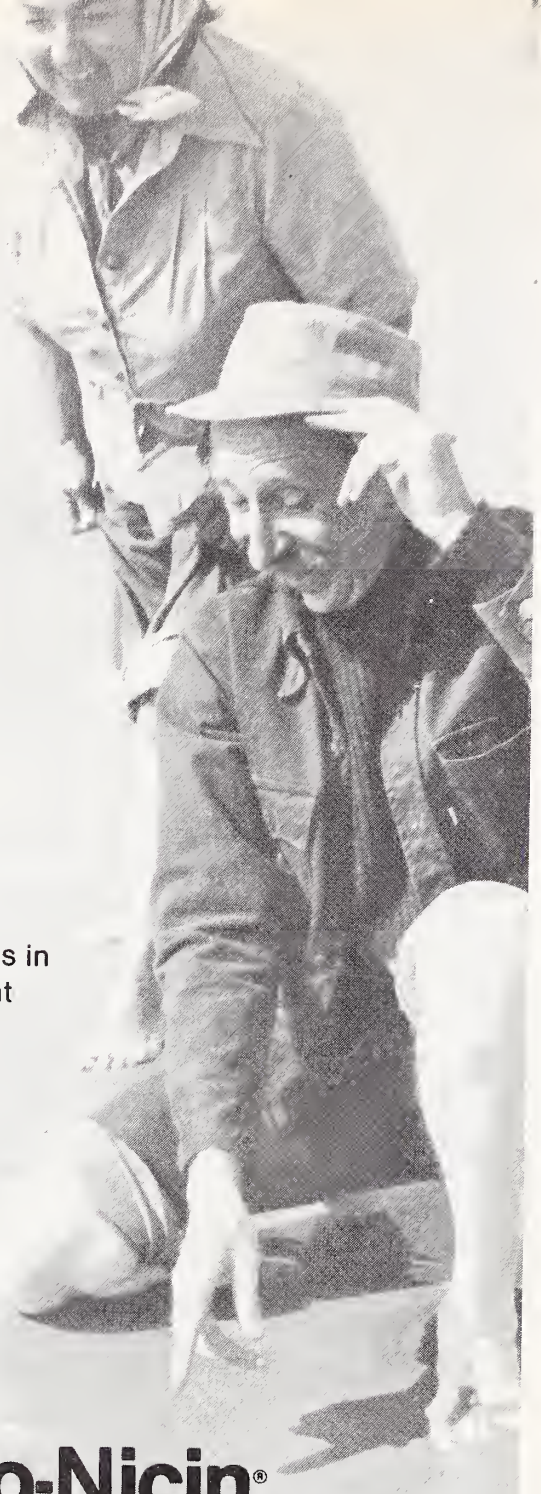
Paul L. Maitheny, M.D., 99 Pawnee Road, Lakewood, NJ 08701. Graz (Austria) 1951. Board eligible. Any type practice. Available July 1980.

Ahmed Naimetulla Syed, M.D., 3430 Kay Street, Apt. D-11 Colony East, Columbia, SC 29210. Kakatiya (India) 1971. State hospital, university, institution, or correction center. Available.

PULMONARY DISEASES—Susan Kallos Sekely, M.D., 7528 Arlington Expressway (220), Jacksonville, FL 32211. Budapest U. of Med. Sciences 1952. Board certified. Hospital, group, or state institution. Available.

RADIOLOGY—Donald S. Cohen, M.D., 1089 Briar Way, Fort Lee 07024. Guadalajara (Mexico) 1975. Board eligible. Group, partnership, solo (will consider purchase). Available.

Bernard S. Jay, M.D., Box 1356, Madison, CT 06443. Georgetown 1971. Special in-



Alert and functioning in the sunset years

Treat the symptoms in the geriatric patient

apathy
irritability
forgetfulness
confusion

Cerebro-Nicin®
CAPSULES

A gentle cerebral stimulant and vasodilator for the geriatric patient

Each CEREBRO-NICIN® capsule contains:

Pentylenetetrazole	100 mg.
Nicotinic Acid	100 mg.
Ascorbic Acid	100 mg.
Thiamine HCL	25 mg.
l-Glutamic Acid	50 mg.
Niacinamide	5 mg.
Riboflavin	2 mg.
Pyridoxine HCL	3 mg.

AVAILABLE: Bottles 100, 500, 1000

SIDE EFFECTS: Most persons experience a flushing and tingling sensation after taking a higher potency nicotinic acid. As a secondary reaction some will complain of nausea, sweating and abdominal cramps. The reaction is usually transient.

INDICATIONS: As a cerebral stimulant and vasodilator.

RECOMMENDED GERIATRIC DOSAGE: One capsule three times daily adjusted to the individual patient.

WARNING: Overdosage may cause muscle tremor and convulsions.

CONTRAINDICATIONS: Epilepsy or low convulsive threshold.

CAUTION: Federal law prohibits dispensing without prescription. Keep out of reach of children.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

terest, diagnostic radiology. Also, general internal medicine. Board certified. Group or hospital-based (shore areas), all aspects of ultrasound. Available.

SURGERY, GENERAL—B. Paulauskas, M.D., 5700 Arlington Avenue, Apt. 2-K, Riverdale, NY 10471. Lithuania 1972. Board eligible. Group, partnership, solo. Available July 1980.

Mohan Lal Sarwal, M.D., 42-52 Union Street, Apt. 117, Flushing, NY 11355. Govt. Medical, Patiala-Punjab (India) 1968. Group, partnership, solo. Available.

Mohammad A. Arain, M.D., 3420 Deanza Avenue, Merced, CA 95340. Liquat Medical (Pakistan) 1969. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

Ranvir S. Achreja, M.D., 2400 Southloop West, #1502, Houston, TX 77054. MGM Medical (India) 1969. Board eligible. Solo, single or multi-specialty group. Available.

Gary G. Wind, M.D., 6202 Singleton Place, Washington, DC 20034. Temple 1970. Special interest, colon and rectal surgery. Board certified. Single or multi-specialty group, research. Available July 1980.

Joseph Dotan, M.D., 1206 East 49th Street, Brooklyn, NY 11234. Hebrew University (Israel) 1966. Special interest, oncology. Board eligible. Multi-specialty group, research, partnership. Available July 1980.

Ronald H. Sultan, M.D., 7750 Roosevelt Boulevard, Eden Roe Apt. 216, Philadelphia, PA 19152. NYU 1973. Special interest, abdominal surgery. Board eligible. Partnership, solo, single-specialty group. Available July 1980.

Nirmal E. Pathak, M.D., 324 Seminole Drive, Montgomery, AL 36117. N.R.S. Medical (India) 1963. Board certified. Any type practice. Available August 1980.

Michael S. Weingarten, M.D., Henry Ford Apartments, 1350 W. Behune Ave., Apt. 1207, Detroit, MI 48202. Columbia 1974. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Nardo T. San Diego, M.D., 171 Davis Avenue, Piscataway, NJ 08854. Far Eastern (Philippines) 1961. Board eligible. Solo or partnership. Available July 1980.

Seeplaputhur G. Sankar, M.D., 128 Normandy Drive, Norwood, MA 02062. Prince of Wales (India) 1974. Special interest, vascular surgery. Board eligible. Group, partnership, solo. Available July 1980.

Jung T. Tsai, M.D., 240 Willoughby Street, Apt. 8-D, Brooklyn, NY 11201. China Medical 1971. Board eligible. Solo, partnership, group. Available.

Absalon Gutierrez, M.D., 1925 Pacific Avenue, Atlantic City, NJ 08401. Nicaragua 1972. Board eligible. Group or emergency room. Available July 1980.

Jeffrey E. Lavigne, M.D., 1591 North Van Buren Avenue, Ottumwa, Iowa 52501. SUNY-Downstate 1970. Also, peripheral vascular surgery. Board certified. Any type practice. Available.

Juanilito N. Seldera, M.D., 4114 Ninth Avenue, Brooklyn, New York 11232. Univ. of East (Philippines) 1972. Special interest, surgical oncology. Board eligible. Group, partnership, solo. Available July 1980.

Ronald Bagner, M.D., 3450 Wayne Avenue, Apt. 24-A, Bronx, NY 10467. St. Louis 1974. Board eligible. Any type practice. Available July 1980.

SURGERY, ORTHOPEDIC—Joseph D. Jannuzzi, M.D., P.O. Box 6012, Lake Charles, LA 70606. Wayne State 1962. Board certified. Partnership, single or multi-specialty group. Available.

SURGERY, PLASTIC—Edmond B. Cabbabe, M.D., 5064 Clairidge Drive, Apt. 214, St. Louis, MO 63129. Damascus (Syria) 1972. Board eligible (general and plastic surgery). Solo or partnership. Available August 1980.

SURGERY, THORACIC—Louis T. Kanda, M.D., 12000 Edgewater Drive, Lakewood, OH 44107. George Washington 1970. Board certified (general surgery). Group, partnership, institutional. Available August 1980.

Khalid Y. Khan, M.D., 8 Gulf Lane, Galveston, TX 77550. King Edward (Pakistan) 1970. Also, general surgery. Board eligible (general surgery). Solo, institutional, single-specialty group. Available.

Anne-Marie Régal, M.D., 708 Beach Avenue, Bronx, NY 10473. Boston 1970. Board eligible. Single-specialty group, partnership, or institutional. Available July 1980.

SURGERY, UROLOGICAL—Steven H. Paletsky, M.D., 841 Ridgeview Drive, Medina, OH 44256. Med. U. of SC 1973. Board eligible. Partnership, solo, single-specialty group. Available.

Marc B. Osias, M.D., 12205 Morocco, NE, Albuquerque, NM 87111. Yale 1972. Board eligible. Partnership, single or multi-specialty group. Available July 1980.

William A. Mandour, M.D., 149 Elm Drive, Rochester, NY 14609. Loyola-Stritch 1974. Partnership, single or multi-specialty group. Available August 1980.

Harry F. Reiss, M.D., 2100 East Chester Road, Apt. 2-K, Bronx, NY 10461. Guadalajara 1973. Board eligible. Single or multi-specialty group, partnership. Available July 1980.

Sidney Goldfarb, M.D., 305 E. 24th Street, New York, NY 10010. Einstein 1975. Single or multi-specialty group, partnership, solo. Available.

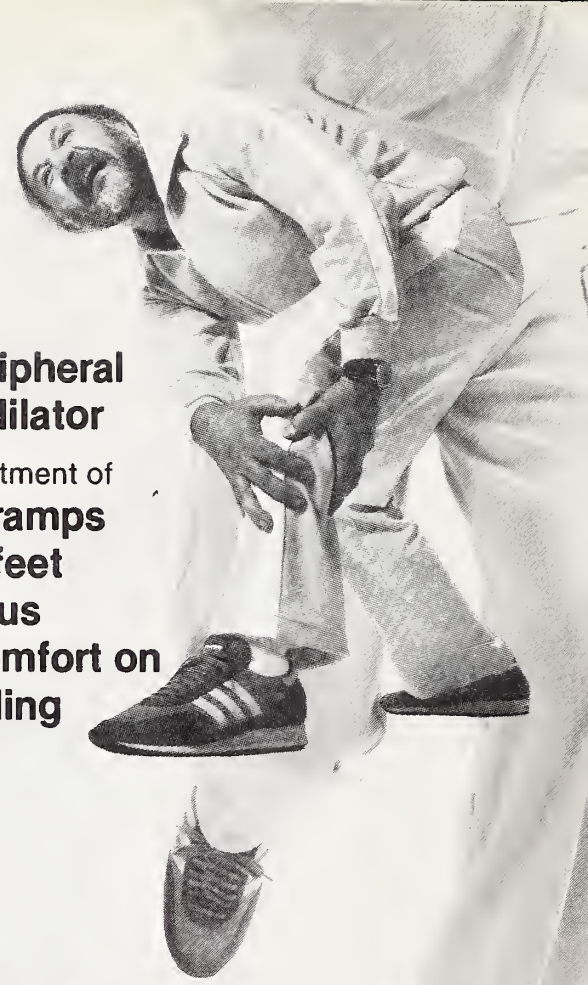
UROLOGY—G. Rosenberg, M.D., 205 West 15th Street, New York, NY 10011. NYU 1974. Board eligible. Partnership, group, solo, multi-specialty group. Available July 1980.

Balakrishna Sundar, M.D., 912 Parkview Lane, Des Plaines, Illinois 60016. Maulana Azad (India). Board eligible. Group, partnership, solo. Available July 1980.

Eliahu Koren, M.D., 5700 Arlington Avenue, Apt. 6-J, Riverdale, NY 10471. Jerusalem 1968. Board eligible. Group, partnership, solo. Available July 1980.

Krishan G. Gupta, M.D., 21 Losson Garden Drive, Buffalo, NY 14227. Kanpur (India) 1964. Board eligible. Solo, partnership, group. Available July 1980.

Kirit S. Shah, M.D., 32 Grand Canyon Dr., Madison, Wisconsin 53705. Baroda (India) 1971. Board eligible. Group, partnership, solo. Available July 1981.



A peripheral vasodilator

for treatment of
leg cramps
cold feet
tinnitus
discomfort on standing

LIPO-NICIN®

Nicotinic Acid Therapy

For patient's
comfort/convenience
in choice of
3 strengths

Gradual Release
LIPO-NICIN®/300 mg.

Each time-release capsule contains:
Nicotinic Acid 300 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
in a special base of prolonged therapeutic effect.
DOSE: 1 to 2 tablets daily.
AVAILABLE: Bottles of 100, 500.

Immediate Release
LIPO-NICIN®/250 mg.

Each yellow tablet contains:
Nicotinic Acid 250 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

LIPO-NICIN®/100 mg.

Each blue tablet contains:
Nicotinic Acid 100 mg.
Niacinamide 75 mg.
Ascorbic Acid 150 mg.
Thiamine HCL (B-1) 25 mg.
Riboflavin (B-2) 2 mg.
Pyridoxine HCL (B-6) 10 mg.
DOSE: 1 to 5 tablets daily.
AVAILABLE: Bottles of 100, 500.

Indications: For use as a vasodilator in the symptoms of cold feet, leg cramps, dizziness, memory loss or tinnitus when associated with impaired peripheral circulation. Also provides concomitant administration of the listed vitamins. The warm tingling flush which may follow each dose of LIPO-NICIN® 100 mg. or 250 mg. is one of the therapeutic effects that often produce psychological benefits to the patient.

Side Effects: Transient flushing and feeling of warmth seldom require discontinuation of the drug. Transient headache, itching and tingling, skin rash, allergies and gastric disturbance may occur.

Contraindications: Patients with known idiosyncrasy to nicotinic acid or other components of the drug. Use with caution in pregnant patients and patients with glaucoma, severe diabetes, impaired liver function, peptic ulcers, and arterial bleeding.

Write for literature and samples

BROWN THE BROWN PHARMACEUTICAL CO., INC.
2500 West Sixth Street, Los Angeles, California 90057

REFER TO PDR

From the Continuing Medical Education Desk



RECENT
PROGRESS
SYMPOSIUM

June 28, 1980
(6 Hours CME Credit)

PSYCHIATRIC EMERGENCIES
PART TWO

featuring

Andrew E. Slaby, M.D., Ph. D., M.P.H.
Professor of Medicine and Psychiatry, Brown University

and

Other Distinguished Speakers from
Yale University School of Medicine
and
The National Institute of Mental Health.

Contact
FAIR OAKS HOSPITAL, Summit, N. J. 07901
(201) 277-2300

Julie Gambal Grimes, Auxiliary President



Julie Gambal Grimes, the 1980-1981 president of the Medical Society of New Jersey Auxiliary, has devoted her life to nursing, to her family, to community service, and to the Auxiliary. Her newly elected position is a fitting zenith to her career.

Julie originates from Old Forge, Pennsylvania, but has lived in Haddonfield, New Jersey for the last quarter of a century. After studying at the Wilkes-Barre (Pennsylvania) General Hospital School of Nursing, she received a Bachelor of Science degree at the University of Pennsylvania and served as head nurse in the University Hospital.

Julie and Elmer Louis Grimes, now chief of surgery at Our Lady of Lourdes Hospital in Camden, were married in 1950. They have three sons and a daughter.

Mrs. Grimes fulfilled many offices and chairmanships enroute to her assumption of the presidency of the Camden County Auxiliary in 1967. In the State Auxiliary she was JEMPAC liaison representative, finance chairman, treasurer, corresponding secretary, director, second vice-president, membership chairman, first vice-president, convention chairman, president-elect, workshop chairman, and project bank coordinator. She was also state chairman of AMA-ERF and at the national level she served as vice-chairman and chairman for local arrangements of the AMA Auxiliary's conventions in Atlantic City.

Julie Grimes' community activities include local hospital auxiliary programs, as well as membership in the Federated Woman's Club of Haddonfield and the Women's Committee for the Philadelphia Orchestra. She is active with the annual University of Pennsylvania Antique Show. With all of this, Julie has time to sing in her church choir. A.K.

CME Calendar

MEDICINE (includes Family, Internal, and General Medicine and Dermatology)

July

8 **Pancreatic Cancer**
8-9:30 p.m.—Shore Memorial Hospital, Somers Point
(Shore Memorial Hospital and AMNJ)

Postgraduate Allergy Workshops
Pocono Manor Inn, Pocono Manor, Pa.

24 2-5 p.m.—registration
25 8 a.m.-5:30 p.m.
26 8 a.m.-12:15 p.m.
27 8:30 a.m.-12:15 p.m.
(Holy Name Hospital and AMNJ)

Aug.

12 **Hypertension**
8-9:30 p.m.—Shore Memorial Hospital, Somers Point
(Shore Memorial Hospital and AMNJ)

NEUROLOGY/PSYCHIATRY

July

1 **Diagnostic and Statistical Manual of**
8 **Mental Disorders DSM-III**
15 10 a.m.-12 noon—Trenton Psychiatric
22 Hospital
29 *(Trenton Psychiatric Hospital and AMNJ)*

Aug.

5 **Diagnostic and Statistical Manual of Mental Disorders DSM-III**
10 a.m.-12 noon—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

7 **Psychotropic Medication for Depressed Elderly**
14 **Acute Psychoses**
21 **Psychiatric Disorders in Drug Abusers**
28 **Tricyclic/MAOI Combinations**
12 noon-1 p.m.—Carrier Foundation, Belle Mead
(Carrier Foundation and AMNJ)

Clinical Center Study of Patients with Sarcomas

The National Cancer Institute is seeking the referral of patients with primary soft tissue or bony sarcomas for the evaluation of new programs for the treatment of these diseases.

We are interested in seeing any patient with a diagnosis of fibrosarcoma, liposarcoma, rhabdomyosarcoma, osteogenic sarcoma, undifferentiated sarcoma, synovial cell sarcoma, mesenchymoma, angiosarcomas or any soft tissue mass suspected of being a sarcoma.

Patients suitable for these treatment protocols are primarily those who have had incisional or needle biopsy or local excision to confirm the diagnosis. Selected patients with previously untreated metastatic disease also may fit into the treatment protocols.

Every effort will be made to keep you fully informed as to the results of treatment and promptly to return the patient to your care for joint followup in collaboration with the Nation Cancer Institute.

Because of the investigative nature of these treatment protocols, patient care and transportation costs are reimbursed by the National Cancer Institute.

To refer a patient or to obtain further information please call or write to:

Ernest V. deMoss, M.D., Admitting Officer, Surgery Branch, National Cancer Institute, Building 10, Room 10N119, Bethesda, Maryland 20205—(301/496-1533 (collect)) or Steven A. Rosenberg, M.D., Ph.D., Chief of Surgery, National Cancer Institute, Building 10, Room 10N116, Bethesda, Maryland 20205—(301/496-4164 (collect) .

The five-year survival of patients with most soft tissue and bony sarcomas is less than 40 percent. We would very much appreciate your assistance in our efforts to improve the dismal outlook for these patients.

LETTERS TO THE JOURNAL

Glucagon in School

March 24, 1980

Dear Dr. Krosnick:

In response to your editorial "Glucagon in School" in the March 1980 issue of *The Journal* (77:163-164), I would like to add one supplementary area of concern in diabetes—"hypoglycemia at home." In making over 25,000 house calls in a quarter century, I have found families uninstructed or improperly instructed by their medical adviser for treatment of hypoglycemia at home by the "orange juice reflex," a one-track-minded state.

A family member seeking to treat a suspected hypoglycemic reaction will go looking for orange juice *when there is a bowl of sugar in the house* because previous instructions were limited to "give him orange juice." The sugar content of the ever-present bottle of milk (5%) is forgotten, as well as jelly, candy and honey—all the attention is focused on a search for orange juice, and even a fresh orange is not recognized as a source of emergency sugar.

Hypoglycemic reactions to Diabinese® in the elderly who omit breakfast for any reason should be anticipated by explaining to the live-in relative: "Mix two tablespoons of sugar in half a glass of warm water; some will remain settled on the bottom—drink all of it! Keep milk, honey, jelly or candy in the house if you don't use sugar. You may have heard of orange juice but you *don't need it* if you have the other items."

How much better the patient and family can cope after the above advice than a frantic search for the magic Florida elixir.

(signed) Morris Soled, M.D.

Confidentiality and PSROs

April 18, 1980

Dear Dr. Krosnick:

On September 25, 1979, U.S. District Judge G. Gesell ruled in favor of Ralph Nader's group, that exceptions to the Federal Freedom of Information Act (F.O.I.A.) did not apply to the local Washington, D.C. PSRO, the National Capitol Medical Foundation. He stated that the intent of Congress in writing the original legislation "must be clearer." Since this was a district court, no precedent was set.

This decision is now being appealed by the National Capitol Medical Foundation supported by the American Association of PSROs (AAPSRO) and legislation either deferring the effect of an adverse judgment of more explicitly exempting PSROs is being considered in Congress. There is some reluctance of Congress to pass such legislation in this era of "consumerism."

This issue threatens the continued existence of physician control or influence upon PSROs, but not the continuation of those functions that many of you find objectionable. The delegates to the AAPSRO's Annual Meeting were unanimous in agreeing that all would resign if the information and consideration of PSRO were "open to discovery."

The issue is not the disclosure of irregular pieces of data. Those data are available in each hospital and are now more vulnerable to discovery than the PSRO data. The data also are collected, analyzed and available to both Medicare and Medicaid. Physician profiles can be generated by both Medicare and Medicaid at any time and there is nothing that prevents their publication or dissemination to the press. Medicare also can determine and publish mortality rates for procedures or physicians.

PSRO is determined to protect the conclusion of those physicians that have been asked by the PSRO or by participating hospitals or by medical staffs to investigate and evaluate problems or anomalies that have been noted. It is these conclusions, some recommending the upgrading of a hospital's equipment or procedures, and many blocked by H.S.A., that will not be revealed. These "facts" if displayed in *The New York Times* or *Forum* would lead to irreparable damage to both the hospital's and physician's reputations. It is the professional aspect of PSROs' activities that it must protect.

If PSRO does in fact lose, and the worst possible future does develop, it is possible, for example, that any string of surgical "bad luck" or any hospital's mortality for myocardial infarctions (MIs) could be published, for the mechanism for review has been legislated. A physician wishing to escape the system that could exist then would have to either restrict his practice to private paying patients or work for either the State or Federal Government.

(signed) Edward O. Fox, M.D.

OBITUARIES

Dr. G. Ash (Golat)

On April 13, Gertrude Oberlander Ash (Golat) died in St. Barnabas Medical Center, Livingston, after a long illness. Born in Vienna, Dr. Ash was graduated from the University of Vienna Medical College in 1933 and emigrated to the United States in 1937 for graduate work in pediatrics, gynecology, endocrinology, and cardiology. She had practiced general medicine with special interest in gynecology for twenty-eight years in Newark and for the past thirteen years in South Orange. She had been affiliated with St. Mary's Hospital in Orange, and Newark Beth Israel Medical Center, St. Michael's Medical Center, and United Hospitals of Newark. Dr. Ash was a pioneer in sex education training for teachers in Newark's junior and senior high schools and had been school physician for the Newark Board of Education.

Dr. Christopher C. Blake

On April 23, Christopher Columbus Blake, M.D., died at his home in West Orange after a long illness. A native of New Jersey, born in 1928, Dr. Blake earned his medical degree from the Medical College of the University of Paris in 1964. He took a residency in pediatrics at the Jersey City Medical Center and St. Michael's Medical Center in Newark and practiced that specialty in Newark for 14 years. He was a Fellow of the American Academy of Pediatrics and of the Royal College of Medicine in London, and was board certified in his specialty. Dr. Blake was listed in the 1977-1978 edition of *Who's Who Among Black Americans*. He had been on the staff at Newark Beth Israel Medical Center, St. Michael's Medical Center and United Hospitals of Newark. During the Korean conflict, Dr. Blake served with the United States Army.

Dr. Mario D. Capio

A member of our Passaic County component, Mario D. Capio, M.D., died on April 22 in Florida. A native of Italy, Dr. Capio earned his medical degree from the medical college of the University of Rome, class of 1940, and emigrated to New Jersey 25 years ago. He practiced general medicine in Paterson and had been affiliated with the Paterson General Hospital. He was 65 years old at the time of his death.

Dr. George A. Greenberg

An emeritus member from our Somerset County component, George A. Greenberg, M.D., died on March 30 at the age of 75. A native of New York City, Dr. Greenberg was graduated from the Washington University Medical School in Saint Louis in 1931 and pursued a practice in internal medicine in Somerville until retiring on July 1, 1977. Dr. Greenberg had been affiliated with the Somerset Hospital in Somerville.

Dr. Ross J. Maggio

One of Union County's senior members, Ross J. Maggio, M.D., died on April 14 in Muhlenberg Hospital where he had long been a member of the attending staff. A native of New York City, born in 1905, Dr. Maggio was graduated from New York University Medical School, class of 1930, and, after a residency in general medicine at Bellevue Hospital, he practiced in the Westfield area until retirement in 1971, at which time he was honored by the Muhlenberg Hospital for outstanding service to that institution. Dr. Maggio was a member of the American Academy of Family Practice, and was active in civic affairs. He had been physician to the Westfield public school system and to the high school football teams in that town. During World War II he served in the medical department of the AUS.

Dr. Stephen Sewell

At the grand age of 81, Stephen Sewell, M.D., a member of our Monmouth County component, died on March 3 at JFK Memorial Hospital in Lake Worth, Florida, where he was living in retirement. A native of Hungary and a graduate of the University of Maryland School of Medicine, class of 1933, Dr. Sewell took graduate work in internal medicine at Columbia University's College of Physicians and Surgeons and was board certified in that specialty. He had had offices in Spring Lake and was affiliated with the Point Pleasant Hospital and the Jersey Shore Medical Center in Neptune until 1954, when he accepted an appointment at the VA Hospital in Wilkes Barre, Pennsylvania. He returned to New Jersey to the VA facility at Lyons and more recently was on the staff at the Marlboro State Hospital. Dr. Sewell was a Fellow of the American College of Physicians. During his years of practice in Spring Lake he had been active in county medical society affairs and was long a representative from his county to MSNJ's House of Delegates.

Dr. Manuel M. Villaverde

Word just has been received of the death on December 31, 1978 of Manuel Maria Villaverde, M.D., in Miami, Florida where he was living in retirement. A member of our Hudson County component, Dr. Villaverde was born in Spain in 1905. He earned his medical degree from the School of Medicine of the University of Madrid (Spain) in 1930 and took graduate work in internal medicine and endocrinology there and in Cuba at Havana University. Dr. Villaverde practiced internal medicine in Cuba and was on the faculty of the medical school until emigrating to the United States in 1960. He was affiliated with the Woodbridge State School and the Veterans Administration facility in Newark, and maintained a private practice in Union City. Dr. Villaverde contributed to the world medical literature, having had many books on nutrition, diabetes, and clinical investigation published. He also had about 200 articles published in medical journals in France, Spain, Cuba, and the United States including *The Journal* of the Medical Society of New Jersey. Dr. Villaverde will receive MSNJ's Golden Merit Award posthumously at the ceremonies this month.

BOOK REVIEWS

The Immobilized Patient: Functional Pathology and Management.

Franz U. Steinberg, M.D. New York, Plenum Medical Book Co., 1980. Pp. 156. ($16.50)

Franz U. Steinberg's charge in preparing this book was to discuss the pathophysiologic effects of immobilization. Dr. Steinberg succeeds with distinction.

He points out that *bedrest* was not even considered therapeutic until the late 19th century; and reached its zenith with the tubereulosis sanatoria industry of central Europe. It then took a half century to establish the debilitating effects of such immobilization. Dr. Steinberg cites the literature of the late second world war, both to confirm the benefits of mobilization, and establish the foundation of rehabilitation medicine. He continues his review to the era of aviation and space medicine.

While recognizing the impossibility of dividing the human body into systems when treating the whole patient, Dr. Steinberg is forced to discuss immobilization under the general headings of circulation and respiration, bone, muscle, joints, and skin, with an additional chapter on psychological aspects. Each chapter is followed by scores of references.

One could amass this information in years of search through world literature. Physicians, residents, therapists and the informed lay person would do well to consult this small volume for proof of the efficacy of remobilization.

Bertrand John Bensam, M.D.

Ailments of Aging: From Symptom to Treatment

M. Villaverde, M.D. and C. MacMillian, M.D., Van Nostrand Reinhold, New York, 1980. Pp. 795. ($34.50)

I trust no one will blame our elders for the publication of this "reference" book. Our elders have trouble enough. *Ailments of Aging* is one-third a listing of drugs past and present and two-thirds directions on treating almost everything. Among the drugs listed are: aminopyrine (Pyramidon®), antipyrine, nikethamide (Coramine®), and amphetamine (Benzedrine®).

Among the diseases listed as being allegedly related to the aged are "occupational spasms." "Cancer" (all sites included), "emphysema" (chronic bronchitis), "brain syndromes."

Some symptoms to be aware of, according to the authors, are "weakness" (asthenia), "unconsciousness," "tumor" (a mass), and "abnormal defecation."

After reading most of the 780 pages of cookbook medicine, I was sure that the initial publication date was 1880, and that the date of March 1980 was an error.

David Eckstein, M.D.

Orthopaedic Traction Manual

Andrew F. Brooker, Jr., M.D. and Gerhard Schmeisser, M.D. Baltimore, Maryland, Williams and Wilkins, 1980. Pp. 110. Illus. ($11.95)

The authors correctly indicate the need to remind their colleagues of the principles and techniques of traction. Not all fractures can be managed by immobilization and/or surgery. Most of the text is concerned with fractures, but other uses of traction are described. The book is intended not only for physicians, but also for nurses' stations, emergency departments, and students. In this purpose, the volume misses the mark. Many of the descriptions may not be clear to those not already familiar with the use of traction and the anatomical considerations involved.

There are a number of typographical errors, misspelled words, phrases missing, others duplicated, which can be misleading. It is surprising that an experienced publisher would circulate a volume in need of extensive proofreading. The paperback format and inexpensive price are no excuse for careless production. This is unfortunate, since there is much useful information in the book. The line drawings are generally satisfactory. Hopefully, a more carefully organized edition can be anticipated.

Daniel J. O'Regan, M.D.

Handbook of Pediatrics, 13th Edition.

Henry K. Silver, M.D., C. Henry Kempe, M.D., Henry B. Bruyn, M.D., Los Altos, CA, Lange, 1980. Pp. 735. ($9.50)

Some pediatric residents affectionately call this handbook "What to do until the doctor comes." This new edition costs only $2 more than the 1975 edition. With the help of Dr. Robert Winters on fluids and Dr. Ruth Kempe on behavior the three musketeers of the West have done it again, and quite successfully.

They have given us a fabulous amount of useful information in 735 pages. I strongly recommend this book as useful for relearning and refreshing. It is clearly not a primary teaching source and the authors in their preface seem to agree with this position.

Much new information is included. Zinc sulfate is considered effective therapy for acrodermatitis enteropathica. Phencyclidine is included in the list of abused hallucinogens. The existence of a non A non B hepatitis is mentioned. Rifampin is advised for meningococcus exposure. The use of the new meningococcus vaccine for groups A and C is advised. The recent suggestion that prolonged aspirin therapy might be useful in Kawasaki disease is not mentioned. Depakene is not included in the listed drugs for the treatment of epilepsy. The usefulness of the new prostaglandin inhibitors in the treatment of dysmenorrhea is suggested. I am inclined to disagree with the advice that Thorazine® or Compazine® should be used for the vomiting associated with dysmenorrhea. The usefulness of following Hemoglobin A 1 C in children with diabetes mellitus is mentioned but not recommended as strongly as I would like. I believe that is a very useful test.

One of the many strong points of this book are the numerous well-organized charts and tables including those on the hemoglobinopathies, chromosomal disorders, rectal bleeding and others.

All in all this is a good book. Buy it.

Solomon J. Cohen, M.D.

DIRECTOR, Emergency Room Adult Medicine. Direction and control of our emergency services. Board certified in Internal Medicine or Surgery. Specialized training in the delivery of emergency medicine and trauma. Minimum 5 years experience. License to practice medicine in New Jersey. Please send c.v. including salary requirements to Celestino Clemente, M.D., Vice President Medical Affairs, United Hospital Medical Center, 15 South 9th St., Newark, N.J. 07107.

NEEMA EMERGENCY MEDICAL
—a professional association—

EMERGENCY MEDICINE POSITIONS: available with emergency physician group throughout Pa., N.Y., N.J., Mich. and Southeastern U.S. including all suburban, rural and metropolitan areas. Fee-for-service with minimum guarantee provided. Malpractice paid. Practice credits towards board certification. Physician department directors also desired. Please send resume to:

NEEMA Emergency Medical
Ste 400
399 Market St.
Phila., Pa. 19106

In PA call
(215) 925-3511
Those outside of PA call
(800) 523-0776

OPHTHALMOLOGY

Resident physician in Philadelphia, experienced in treatment of cataract. $15,000 per year. Send resume and reference to:

Box No. 197
c/o JOURNAL MSNJ
2 Princess Road
Lawrenceville, N.J. 08648

NEW JERSEY, FLEMINGTON

Outstanding full time career opportunity to join progressive E.M. residency trained director in a community teaching hospital located in semi-rural area 60 miles from New York and Philadelphia. Two year old E.D. facilities (13,000 visits per year) provide an excellent environment for teaching and patient care responsibilities in appropriately utilized E.D. Medical center is the primary provider of health services to county in which our recognized family practice residency program, medical school affiliation and community EMS are well established. E.M. residency trained or experience preferred—Contact Richard Ostendorf, M.D., Director, Emergency Department, Hunterdon Medical Center, Route 31, Flemington, New Jersey 08822 (201) 782-2121.

RESIDENCY IN PHYSICAL MEDICINE AND REHABILITATION

Dynamic, young program with balanced academic and clinical emphasis under the supervision of 10 physiatrists. Three year program and integrated internship/residency with opportunity for research and pursuit of special interests both in medical school and private hospital settings. Stipends from $14,900 to $17,000 depending on qualifications. We will pay for visits in selected cases. Equal Opportunity/Affirmative Action Employer. Telephone or write for information to:

John F. Ditunno, Jr., M.D., Director
Department of Rehabilitation Medicine
Thomas Jefferson University Hospital
11th and Walnut Street
Philadelphia, Pa. 19107
Telephone: (215) 928-6573

REDWOOD DECKS

Call Mike
The Fancy Deck Builder
(201) 595-6263

GOLANI **Martin Mensch, A.E.I.D.**
INTERIOR DESIGNERS & SPACE PLANNERS

A full service, single source interior design organization.

We provide all working drawings and specifications for construction and purchase furnishings.

Let us show you how to plan for a more efficient space and quality traffic flow.

Health Facility Institution

One Landing Road, P.O.B. 454,
Landing, New Jersey 07850
Telephone: (201) 770-0020

BERGEN COUNTY

HOME-OFFICE COMBINATION—Mint condition throughout, 4 Bedroom, 2½ Bath Residence plus Office Suite of 5 rooms and bath. New Addition includes: Ultra Modern Kitchen with beautiful cherrywood cabinets, top quality appliances, large breakfast area; bright 18' Family Room; 27' Master Bedroom Suite with New Bath; 28' Living Room and Banquet-size Dining Room, both with new plush carpeting. Pretty property in fine Waldwick area convenient to NYC and Northern New Jersey Hospitals. $165,000

201-445-7191
CENTURY 21/DON SMITH REALTORS
1 Franklin Tpk. **Waldwick, N.J. 07463**
Independently Owned and Operated



MORRIS COUNTY

FLORHAM PARK, For Sale by Owner, 3-bedroomed Colonial, including private Office Suite with separate entrance, parking; Residence includes new custom kitchen, parquet floor, fireplace. Redwood deck overlooking parklike setting. Low taxes. Close to major medical centers. $136,500.00 Tel: (201)822-3013 or 377-0200.

OFFICE SPACE FOR RENT

Office space available in attractive new professional building located on Main Street in center of town, central New Jersey area, with large hospital five minutes away. Presently, one active medical office in town of 14,000 plus. Presents an unusual opportunity for an immediately successful practice.

Call (201) 722-2928 for additional information.

SYCAMORE
PROFESSIONAL BUILDING
Tinton Falls (Monmouth County)

One Suite now available (1100+ sq. ft.) in well established Medical Building. Suitable for any Medical Specialty. Beautifully landscaped on a busy thoroughfare, ample parking. Will finish to suit.

Call Dr. S. Furman
(201) 542-4433

CLASSIFIED ADVERTISEMENTS

DIAGNOSTIC RADIOLOGIST/ULTRASONOGRAPHER—Presently available. 34 years old, Board Certified, University trained. Specialty includes all modes of ultrasound, computerized tomography, and nuclear medicine. Desires hospital or group practice. Jersey shore area desired. Please write P.O. Box 1356, Madison, Ct. 06443.

PATHOLOGIST—Certified, P.A., Director laboratories 25 years South Jersey Community hospitals. Has academic appointment. Seeking full time or part time position in active hospital setting. Marvin N. Solomon, M.D., 3 Sutliff Avenue, Vineland, N.J. 08360.

PEDIATRICIAN—Seeks private practice opportunity. Currently in practice. 32, married, American, passed written boards, residency CMDNJ Newark. Cooperative, hard worker. David R. Croughan, M.D., 12 Harbor Blvd., East Hampton, N.Y. 11937.

PEDIATRIC ASSOCIATE—New Jersey Shore area, 1 1/2 hours to New York City and Philadelphia. Write Box No. 192, c/o JOURNAL MSNJ.

ALLERGIST—Board Certified or Eligible to join established 11-man multi-specialty Group located in suburban Morris County, New Jersey. Excellent opportunity for a high volume practice in adult and pediatric allergy. Immediate opening available. Write Box No. 198, c/o JOURNAL MSNJ.

DIAGNOSTIC RADIOLOGIST—Part-time position available immediately for Board Eligible or Certified radiologist. Prefer Tuesday and Thursday mornings. Location in South Jersey area. May lead to full-time position. Call or write Richard Krieger, M.D., c/o RKD, Inc., 102 Red Rambler Drive, Lafayette Hill, Pa. 19444. (215) 825-6629.

EMERGENCY ROOM PHYSICIAN—Full or Part-time. Academically oriented. Central New Jersey, modern facility, financially rewarding. Call E.V. McGinley, M.D., (201) 277-0441.

INTERNIST—To join 33 year old Board Certified, University trained internist at New Jersey shore. Send curriculum vitae. Box No. 195, c/o JOURNAL MSNJ.

INTERNIST—Board Certified or Eligible to joint established 11-man multi-specialty Group located in suburban Morris County, New Jersey. Excellent opportunity for high volume practice. Immediate opening available. Write Box No. 196, c/o JOURNAL MSNJ.

PHYSICIAN—Downtown Newark Industrial Clinic, Monday through Friday, 9 to 5; good salary; excellent benefits. Call (201) 643-4969.

PHYSICIAN—Industrial Clinic, Elizabeth, New Jersey. 6 hours a day, 9 to 3 pm Monday thru Friday. Call (201) 467-0522 after 7 P.M.

RADIOLOGIST—Immediate opening. Full-time Associate. Write Box No. 193, c/o JOURNAL MSNJ.

DERMATOLOGY PRACTICE—Buy lucrative West Orange practice. Be own boss. Hire me part-time to acquaint you with patients. Dr. Hanfling, Mornings except Wednesdays (201) 736-0885.

EQUIPMENT—For Sale by Retired Physician. Office and Waiting Room equipment including EKG (Birtcher), diatherym, small refrigerator, instruments. Call Dr. Menden, Dover, N.J. (201) 366-2442.

FOR SALE—HOME/OFFICE—Union County. Elegant, modern, split level home. Office with private entrances in affluent area of Union County. Equipped office with x-ray. High net Family Practice chiefly Internal Medicine. Retiring. Near seashore, N.Y.C. Good schools, hospital 10 minutes, Write Box No. 172, c/o JOURNAL MSNJ.

OFFICE SPACE—To Rent or Share—Ridgewood, Bergen County also Fair Lawn, Bergen County. Possible purchase, ideal locations. Write Box No. 190, c/o JOURNAL MSNJ.

OFFICE SPACE—To share—West New York. Excellent location. Fully equipped. Part-time. Ideal for eye, ENT, plastic surgeon or other specialists. Call (201) 278-1000.

OFFICE SPACE—Brick Town. For Rent, medical office space, new and fully equipped, part/full time. Ocean Medical Park, Brick Town, N.J. Call (201) 295-9003.

OFFICE SPACE—Edison, prestigious new building. Up to 1800 square feet. Occupancy June '80. Ample off-street parking. Call M. R. Bronstein, M.D. (201) 826-5606.

OFFICE SPACE—Hunterdon County. For family practitioner(s) in modern professional building in growing suburban community. 5 rooms/$370; 7 rooms/$475. Write R.D. 1, Box 247 Milford, N.J. 08848. (201) 995-2365.

OFFICE SPACE—Suite for rent in distinguished professional building. 1150 square feet. Immediate occupancy. Call (201) 992-2303.

OFFICE SPACE—Verona, N.J. Exceptional, newly painted, furnished, 1500 square feet, office, 8 rooms, including 4 examining rooms, lab, nurse's office, reception room, consultation room. Various options available. Please write Box No. 194, c/o JOURNAL MSNJ.

INFORMATION FOR MEMBERS—RATES:—$5.00 per insertion up to 25 words; 10 cents each additional word. Payable in advance. WORD COUNT: Count as one word all single words, two initials of a name, each abbreviation, isolated numbers, groups of numbers, hyphenated words. Count name and address as five words, telephone number as one word, and "Write Box No. 000, c/o THE JOURNAL as six words. COPY DEADLINE: Fifth of preceding month.

SOMERSET SECRETARIAL SERVICE

Prompt—Accurate—Confidential

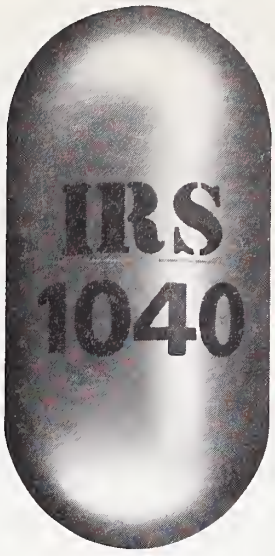
Complete Word Processing Center
Cassette Transcription
Phone-In Dictation
Pickup and Delivery Service Available

CALL (201) 526-8302

83 Grove Street Somerville, N.J.

A SEMINAR FOR DOCTORS BY U.S. TAX PLANNING CORPORATION
DISCUSSING LEGAL ALTERNATIVES TO I.R.S. 1040

The Bitter Pill To Swallow.



COMMON DOSAGE: 40%, 50%, 70%
OF YOUR EARNED INCOME

Description: Excessive tax payments in common dosage of 40%, 50%, even 70% of your income, reduce earnings and inhibit growth of personal wealth. A bitter pill to swallow.

Cause: Inequitable tax laws, complex reporting procedures, and intimidation by audit deter many high-percentage taxpayers from exercising their legal priviledges under current I.R.S. regulations.

Adverse Reactions: Findings include mild to severe depression, irritability and anxiety due to declining net worth and loss of income, resulting in hypersensitivity to sound financial planning.

Antidote: U.S. TAX PLANNING CORPORATION. A group of professionals dedicated to the task of assisting high-percentage taxpayers in keeping tax contributions to an absolute minimum.

Prescription: Attend the U.S.T.P.C. SEMINAR FOR DOCTORS on legal alternatives to crippling taxation. You will learn facts and tax procedures that can drastically improve the profitability of your private, group or corporate practice - and increase your net worth. Learn how to shield earnings from taxation and provide free tax dollars for capital appreciation. Discover the distinction between legal tax avoidance and tax evasion. See how you can defer, reduce or eliminate federal and state taxes - legally!

THIS SEMINAR DEALS WITH SPECIFIC DOLLAR-SAVING TECHNIQUES

Topics: These and more will be presented.
U.S. TAX LAWS • INFLATION • RECESSION • TRUSTS (FOREIGN AND DOMESTIC) • MALPRACTICE (SELF-INSURING) • LEVERAGED SHELTERS • LEASES •TAX-EXEMPT ORGANIZATIONS (501-3-C-CHURCH) • FOREIGN BANKING AND INVESTMENT • FUTURES • TAX PLANNING • OFF-SHORE TAX HAVENS • TRANSFER (INHERITANCE) LAW • INTERNATIONAL ESTATE PLANNING

WE GUARANTEE QUALITY AND CONTENT OF THIS SEMINAR • 100% REFUND

Faculty: MARVIN HELFRICH, J.D. Having earned a degree in Business Administration majoring in Economics and Accounting, and later a Doctorate in Law, Mr. Helfrich has an excellent background for understanding and implementing legal strategies in tax-planning. He is a practicing attorney specializing in tax problems of professional corporations.

JAMES G. BRYAN, Management Consultant and Founder of Doctors Management Consultants, Portland, Oregon, has served the medical/dental profession for many years. A teacher, lecturer, and economist, James Bryan earned his degree at the University of Oregon. He is a recognized authority on Off-Shore Tax Planning, Medical Malpractice Insurance and Tax Straddles.

CARL J. SAVIO, Financial Planning expert and President of Coordinated Professional Services, Philadelphia, Pa., specializes in International Estate Planning, Insurance Options and Tax Havens. An innovator, Savio combines his experience in International Tax Law, Accounting and Business Management to develop sound tax reduction plans for professionals and corporations.

Eligibility: Professionals, their spouse and/or office manager.

Seminar Fee: $95 for doctors (spouses/office managers free), includes continental breakfast. Fees are tax deductible.

Registration: In advance, by mail or phone. Confirmation by return mail upon receipt of check made payable to U.S. TAX PLANNING CORPORATION.

Cancellations: Full refund on cancellations received 48 hours prior to opening session.

Accomodations: If required, we will assist in reserving appropriate accomodations.

Mail To:
U.S. TAX PLANNING CORPORATION
Suite 2415 The Carlton House
Philadelphia, PA 19103 (215) 563-1939

☐ Sat., May 31, 1980 9 a.m. to 5 p.m.
Marriott Hotel Philadelphia, Phila., PA
☐ Sat., June 21, 1980 9 a.m. to 5 p.m.
Cherry Hill Hyatt House, Cherry Hill, NJ

Name: _____ No. attending: _____
Address: _____
_____ Zip: _____
Telephone: _____

For Reservations and/or Information call 1 800 543-3000, Operator 220

U.S. TAX PLANNING CORPORATION

THE LIBRARY
UNIVERSITY OF CALIFORNIA
San Francisco
Telephone – 666-2334
THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

7 DAY LOAN

7 DAY
SEP 4 1986
RETURNED
SEP - 4 1986

365443